THE ARCHITECT & BUILDING NEWS

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- CURRENT MARKET PRICES

APRIL 23, 1953 · VOL. 203 · NO. 17 · ONE SHILLING WEEKLY

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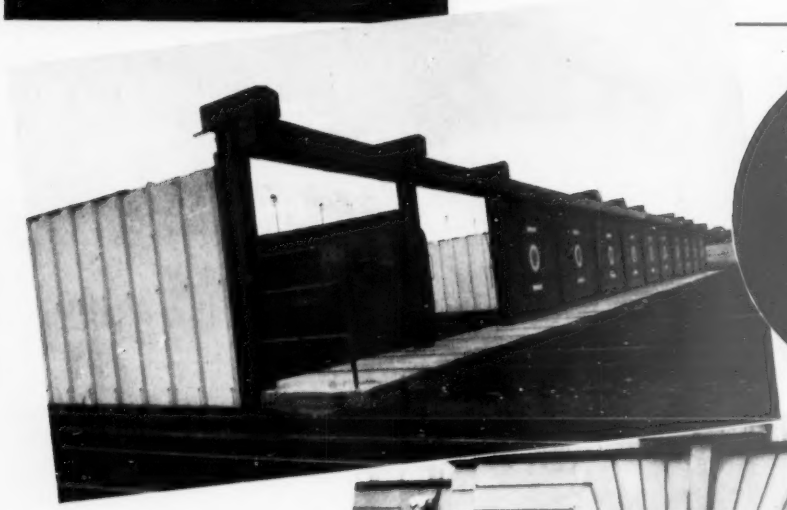

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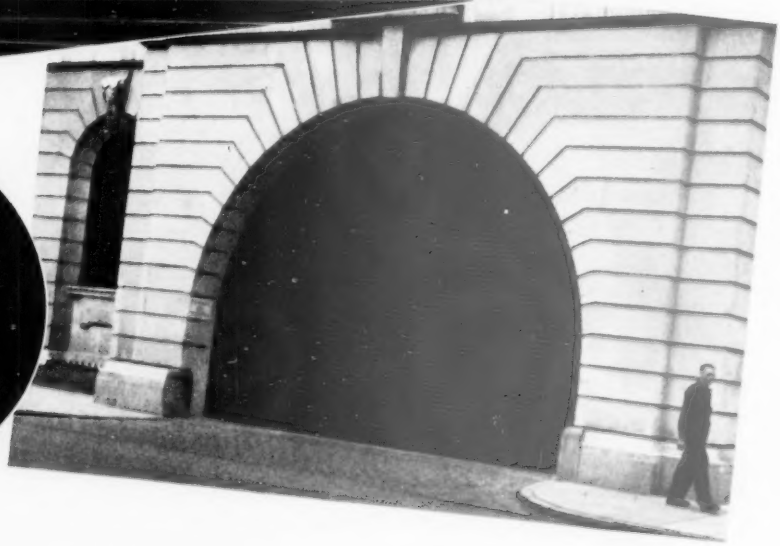

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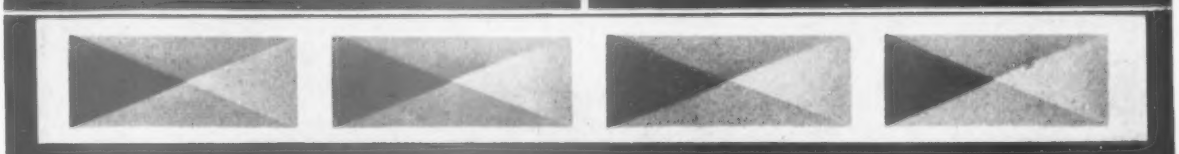

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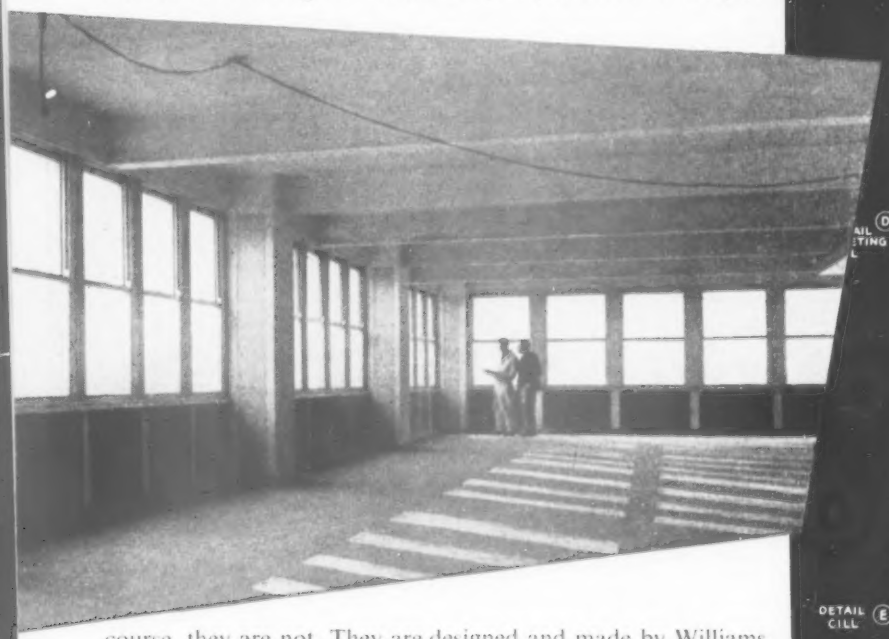

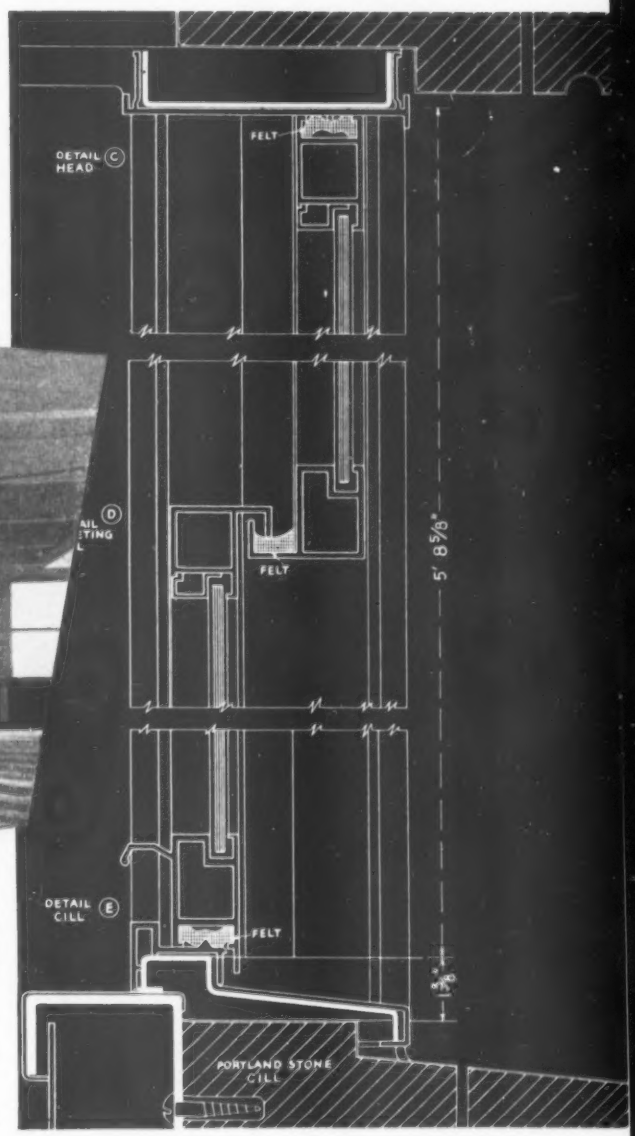

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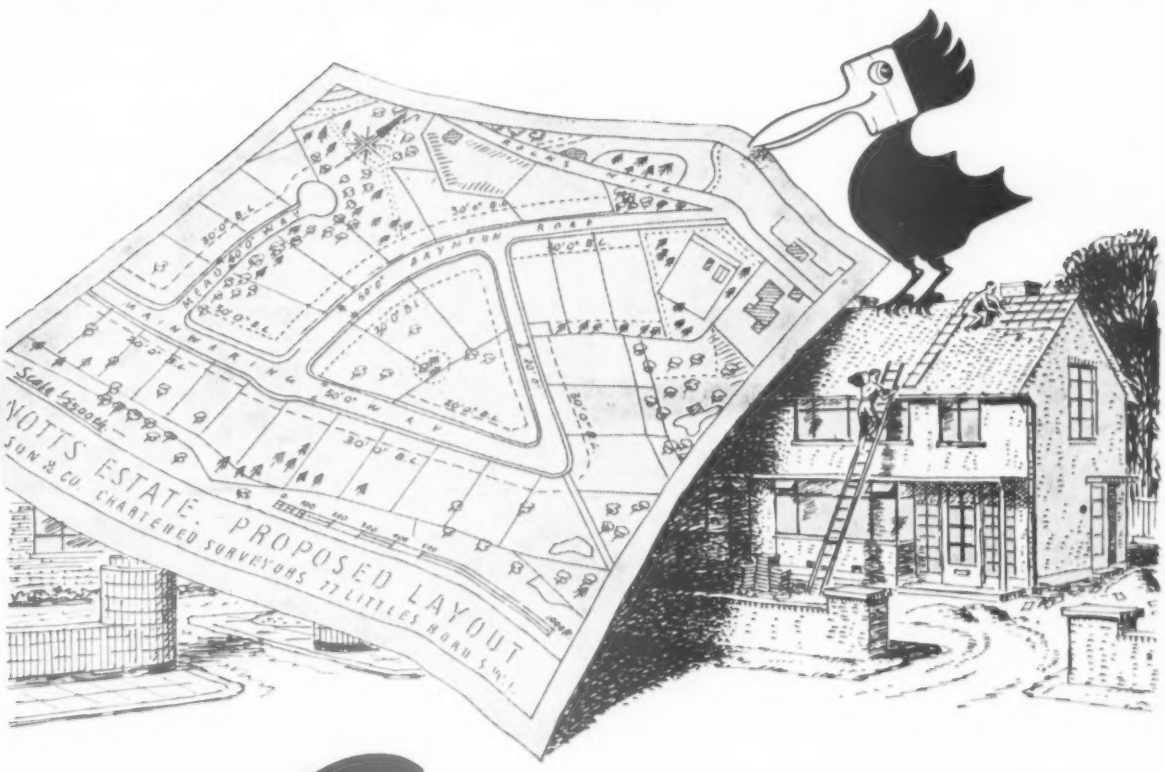

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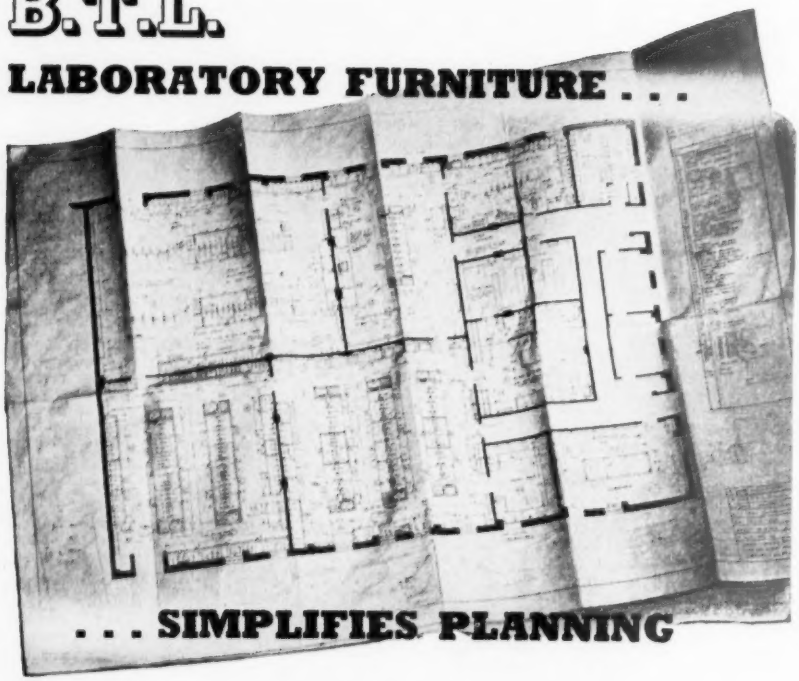

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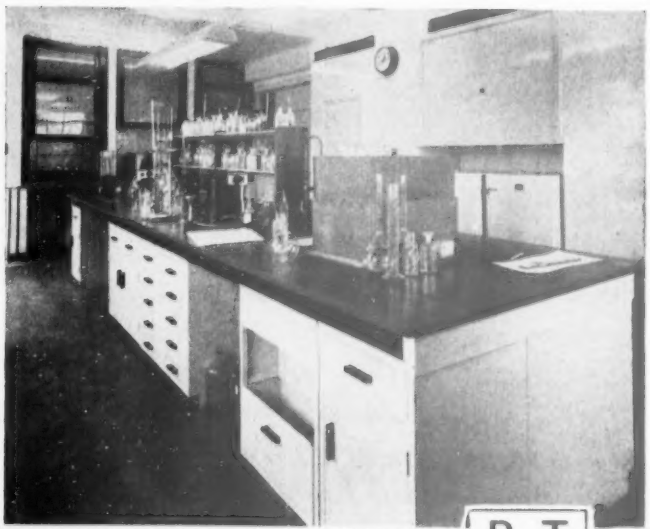

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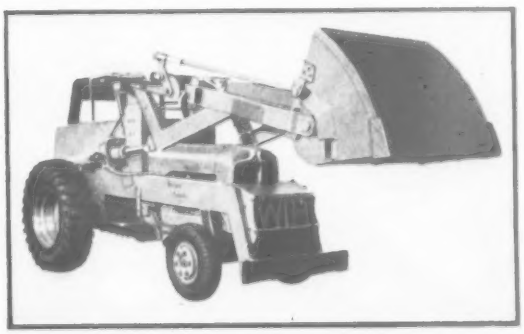

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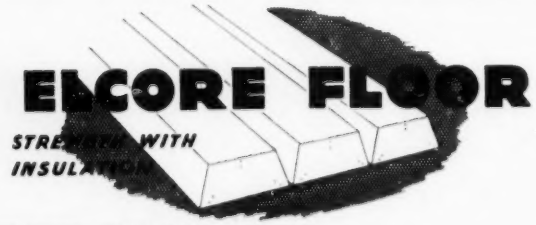

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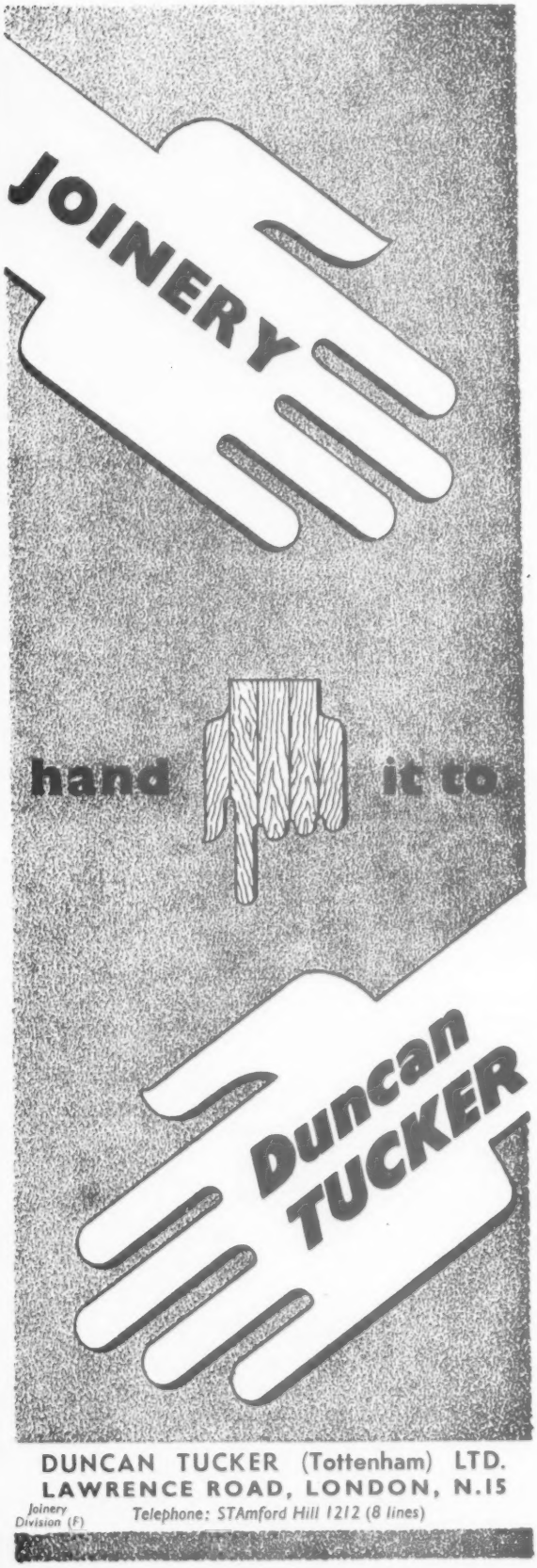

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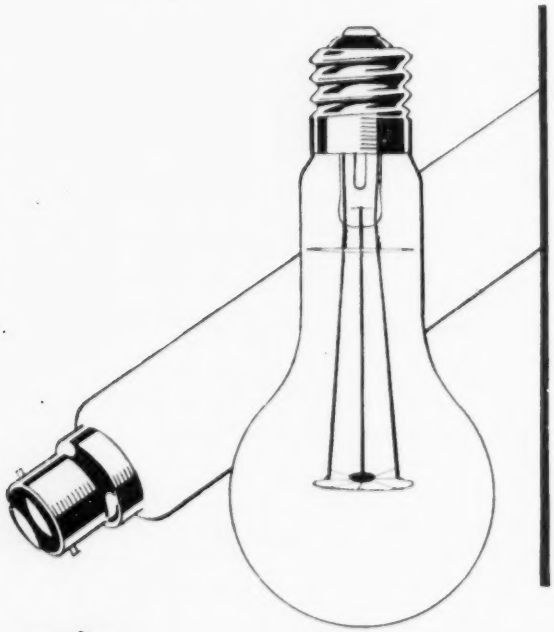

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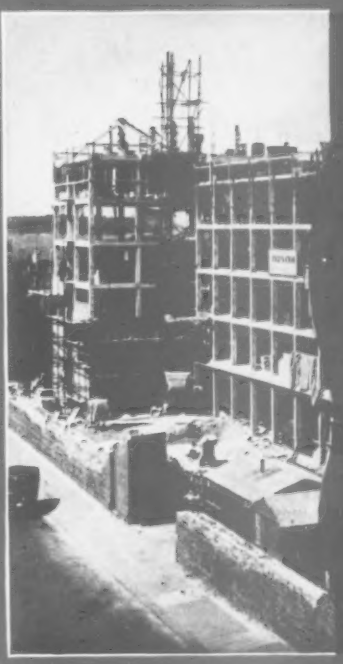

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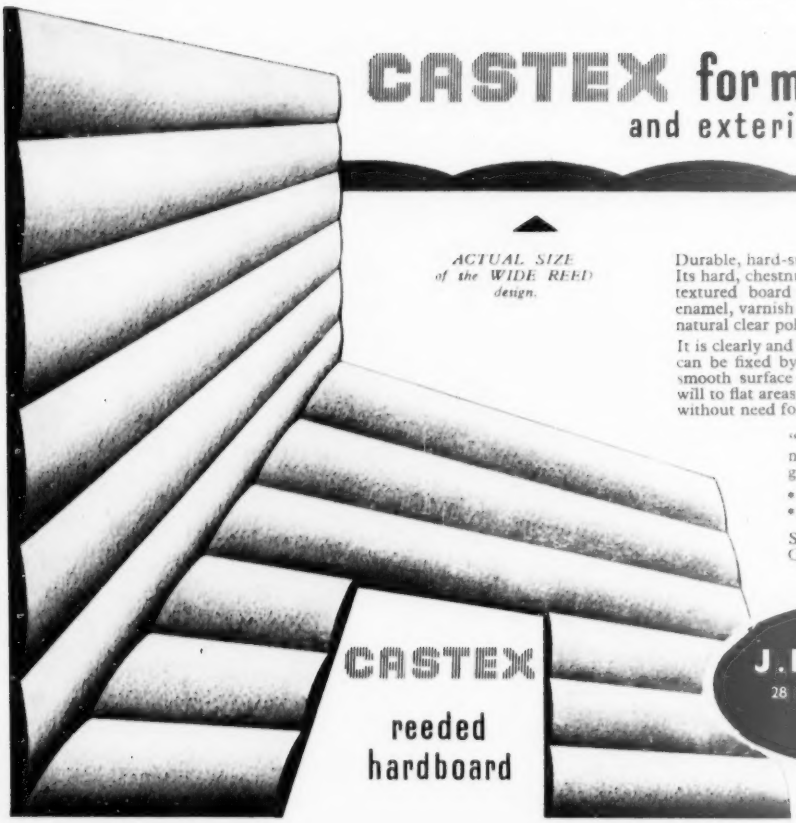

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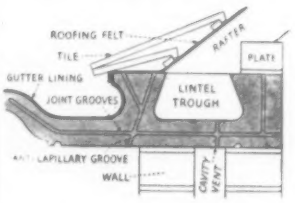

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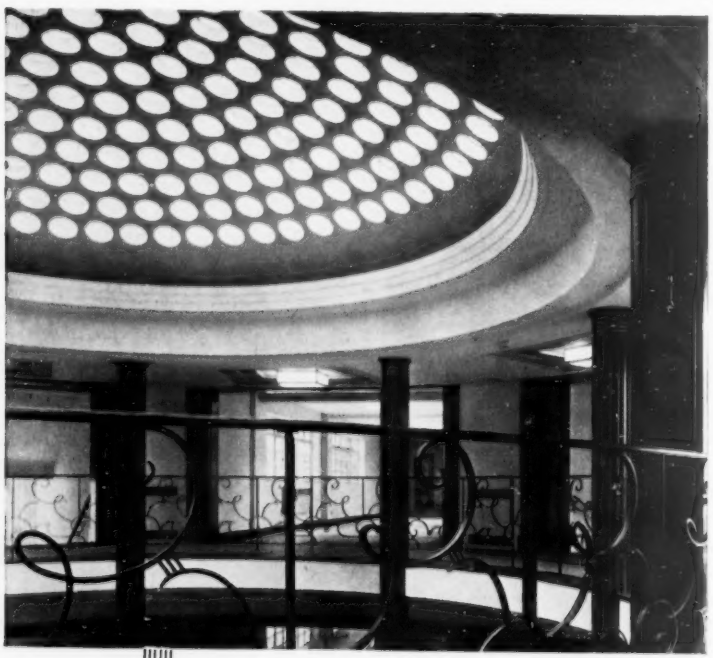

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Vol. 203 No. 17

THE ARCHITECT & BUILDING NEWS

April 23, 1953

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SUB-STANDARD HOUSING

WE have expressed in these columns from time to time a consistent adherence to the idea that the housing problem of this country cannot be solved and the population housed in a minimum manner, comparable with contemporary standards of living, unless all the factors of the problem are considered together and their inter-relationships faced. It is not enough to build even three-hundred thousand houses a year, or to found some dozen new towns to be built over a period of fifteen to twenty years. To rely on these methods is to ignore the state of the inner circles of our larger towns too much and to disclose the lack of land-space on their outskirts. The small contemporary amount of flat-building carried out since the war within the areas of blitz and blight is but a few drops in the bucket. The neglect of near-central area planning and reconstitution does not enable the large areas of urban back-land and unoccupied sites to be encountered and dealt with systematically.

The statistical facts of the matter are gradually emerging from various sources and particularly from the last census figures so far published in the one-per-cent sample cross-section. Some 8,000,000 houses in Great Britain were built before 1914 and the newest of these are therefore entering upon a fortieth year of life. Somewhere between 1,000,000 and 2,000,000 of this vast total are fit only to be eliminated and replaced entirely, either by reason of their state of structural repair or the impossibility of reviving their local amenities. Forty-five per cent of the houses of this country have no fixed bath; 17 per cent have no piped water-supply. In Greater London alone 46 per cent of households share a bath or have no fixed bath at all and 22 per cent share or have no piped water-supply. Obviously these figures must apply to the older houses and must increase with the age of pre-1914 dwellings.

On this sub-standard side of the housing problem the Housing Act of 1949 showed some possible line of attack. It provided for local authorities to make improvement grants, up to half the cost of the improvements, with a concession for rent increase of 6 per cent of the amount of the improvements contributed by the landlord. In addition to these grants to private owners, Circular 90/49 (M.o.H.) suggested that the local authorities should work out schemes for the acquisition and improvement of groups of houses where possible. The cost of the improvements must not be less than £150 or more than £800 per house or dwelling. The Rent Restriction Acts also allow for certain increases of rent where improvements are carried out with the agreement of the tenant.

Up to the end of 1952 less than 2,500 grants for the purposes we have outlined above were approved. So, because we cannot build enough houses, vast numbers of people are to remain anchored to old but structurally sound houses without the minimum amenities of modern heating, hot-water and cooking apparatus, with all the wasteful human effort that the lack of such implies in house-work and health; and this apart from the real slums.

Much has been said and written to prove or disprove that the incentives to make such improvements are insufficient and that other restrictions related to taxation and assessments militate against the improvement of structurally sound but sub-standard houses throughout the country. Most of these effusions are in the realm of hypothesis and, being so, are mainly inconclusive. Even 2,500 examples, often carried out without control (in the scientific sense) and almost entirely without the publication of costs and results are insufficient to prove or disprove the efficacy of the type of reconstitution to which we refer.

Two experiments made with the help of architects, with the approval and close liaison of the local author-

ity officers concerned and about which the Minister of Housing and Local Government and the local Members of Parliament have been informed are now in progress.

One is in the Borough of Croydon and is concerned with six terraced houses built before 1900. Various methods of adding the improved amenities are possible in this case because the houses are of three different plans owing to the shape of the plots. The other experiment is being conducted on four adjacent houses, built in 1880 in Stockton-on-Tees. In each case the tenants have been consulted and all the relevant facts and figures both before work commenced, throughout the course of the work and at its conclusion are being recorded for publication. In the Croydon case the plans and details of the actual schemes are also to be published.

These experiments are being conducted by commercial associations; the former by Federated Foundries Ltd., and the latter by Allied Ironfounders Ltd.* Whatever may be said by the cynical, that, for example, it is to the advantage of such interests to carry out such schemes, the fact remains that they are being carried out and, as far as we can see at present, carried out in the right way. Such experiments should, of course, have already been made by the Government or the local authorities, or both in combination, not in two localities only but in a dozen or more, to prove the possibilities both for owners and the Government alike. A live test can be worth scores of debates or circulars and regulations issued under acts of Parliament and may save, in the long run, much national income. The schemes we have drawn attention to above will be watched with great interest and whatever the results or conclusions, publication of the latter should prove of considerable value.

* *Further particulars from* (1) *The Croydon Experiment, Federated Foundries Ltd.*, 4, *Stratford Place, W.*1. *Mayfair* 5054. (2) *Miss R. Bowley* (*The Stockton Test*), *Salisbury Square House, Salisbury Square, E.C.*4. *Central* 4900.

EVENTS AND COMMENTS

At Heath Park Estate, Dagenham, Mr. Graham Dawbarn addresses a gathering of local people at the unveiling of a plaque by the Mayor, Alderman Mrs. E. M. Millard, J.P., commemorating the Festival of Britain Award of Merit for the first part of the housing scheme for which Norman & Dawbarn are the Architects.

THE A.A. RECEPTION

In spite of the fact that numbers at the A.A. Annual Reception this year were as high as ever there was considerably less congestion, and it seemed to me that with the possible exception of the Council Room no part of the building was uncomfortably crowded. It was even possible to dance in comfort and that is saying something at the A.A. The customary delay at the cloakrooms was completely cured by arranging a one-way system and by holding the actual reception at the other end of the library. The string band was dispensed with and that left more room for the guests, who, at the same time, did not have to shout quite so loudly to make themselves heard to their friends. There were this year three bars and this helped to spread the crowd, but it also made it more difficult to find people. The special exhibitions included some wonderful and interesting ship models lent by Mr. Laurence A. J. Rowley supported by a selection of seascapes from

Photographs of the New Civic Hall at Aalborg, Architect Preben Hansen, are one of the attractions of the Danish Exhibition at the Building Centre. This view shows the entrance at night. An article on the Hall will appear in next week's issue.

the collection of Mr. P. J. Westwood, Mr. Eric Jarret's large and very pretty collection of match-box tops, and a smaller than usual show of work of the school. The A.A. Dramatic Society gave three performances of "Two Gentlemen of Soho," there was a quiz and Mr. George Braund astonished and delighted his audiences with baffling conjuring tricks.

As the reception ended I heard, on all sides, people saying how much they enjoyed themselves. This was undoubtedly largely due to the careful planning of what is traditionally the President's party and it was a fitting climax to Mr. A. R. F. Anderson's year of office during which he has shown himself one of the most devoted presidents that the A.A. has had within memory. The A.A. owes a great deal to the clear thinking and plain speaking and sound common sense of Mr. Anderson. In the very considerable amount of work which he has done during the year he has been most loyally supported by Mrs. Anderson.

DANISH HOUSING

You must see the Exhibition of Danish Housing at the Building Centre. It is open until 9 May. It consists of screens of magnificent photographs of houses and flats erected by one of the leading Copenhagen housing societies the Dansk Almennyttlgt Boligselskab. This society employs private architects to carry out its schemes and very charming they are. Two schemes are of particular interest, the first is a collective house at Sondergaard. Here flats are only let to couples if both go out to work. All services including housework and child parking are arranged on the premises and there are built-in shops, restaurant and bar. The second scheme at Carlsro consists of a large number of bungalows with a centre from which all household services including maternity nursing, sick nursing, cooked meals, house cleaners, child parking, the delivery of shopping, laundry and house cleaning are supplied. Delivery is carried out by electric truck. The Danes lay great stress on the need for providing services as well as accommodation. I have never been to Copenhagen but on the strength of the many delightful schemes illustrated I have decided to go there this summer. I must confess that I am also very keen to see the new civic hall at Aalborg designed by Arkitekts Hansen, Frankild & Kjær which is also illustrated in the exhibition. A full description of this remarkable building, which will seat 3,600 people on one floor, will appear in a later issue. The building is the result of a competition held soon after the war. Building operations were, however, delayed for some years by economic conditions. The photographs and models in the exhibition are supported by a show of Danish furniture and wallpaper currently available in this country. The whole exhibition is well above average and prompts me to ask whether it is not time that we started to send similar exhibitions abroad. Perhaps The Building Centre could sponsor one.

I hear that the Easter beer prepared by some Copenhagen breweries was so unusually strong that large numbers of bars were wrecked by over enthusiastic imbibers. After a few days restaurants refused to serve it any more. It might make a good export line.

CORONATION PROGRESS

For the benefit of those who do not often visit London here are a few notes on the progress of preparations for the Coronation: The Government stands along the route are almost complete, numbers are being stencilled on the seats, and the installation of loudspeakers is going on. Many privately owned stands are appearing on sites owned by clubs and shops. Apsley House has an elaborate steel-framed erection along its façade. The large stand on its western flank is not only covered in but

has a television aerial as well. Almost all the lamp-posts along the route have now been painted their gay colours. The crush doors across roads leading to the processional route are in position and are causing extra traffic congestion, particularly near Trafalgar Square. Private decorating has hardly started but quite a lot of cars are already flying Union Jacks, showing that the practice at last Coronation time has not been forgotten. The vast covered stands outside the Abbey, on the site of the Colonial Office and in Parliament Square, where some of the statues have been completely encased in wood, have completely changed the look of the place. The annexe to the Abbey is well advanced, and most of the removable islands have gone and been replaced by temporary ones. The gay painting of the crush doors in accordance with Sir Hugh Casson's designs has had to be modified, and by the look of some of the colour schemes I imagine that they have been altered as well. This changing of the designer's ideas is, I suppose, unavoidable, but it must be very irritating for him. Eros is back, looking very solid and shiny, and a trial decorated post has been erected in Oxford Street, as it happens just outside a huge stand put up by a store. I saw a party of architects and clients in urgent conclave at the back of the stand, presumably discussing whether the decorations would spoil the view.

Good Coronation souvenirs are not only hard to find but very difficult to buy, and the best delivery that one can expect on a Wedgwood mug designed by Richard Guyatt is six weeks. The traditional Coronation tins of sweets and biscuits are all quite gay, but many of the tins are quite useless, having ill-fitting lids which simply will not stay on. This is a great pity, for the decorated tin, if well made, stays in the family for a lifetime.

OUTDOOR SEATS

The results of the C.O.I.D. outdoor seat competition will be seen in the Victoria Embankment Gardens from May 5 to 16. Some 80 entries are expected, and all will be shown. Those designs awarded first and second class diplomas will be clearly marked. I shall look forward to this exhibition for, with the exception of designs produced by some furniture designers for the Festival of Britain garden, seat design has been at a low level since the cast-iron era.

WIND AND WATERMILLS

Wind and Watermill Section of the Society for the Preservation of Ancient Buildings is holding a conference the purpose of which is to discuss ways and means of interesting the public in the preservation of mills generally. The section is preparing a survey and requires records of mills from all over the country. The conference is to be held in a working watermill at Lindfield, Sussex, by kind permission of Mr. and Mrs. Horsfield. Further particulars from Mr. M. Dance, S.P.A.B., 55, Great Ormond Street, W.C.1.

ROCHESTER CATHEDRAL

Everyone who has travelled to east Kent by train is familiar with the view of Rochester castle and cathedral. Fewer will know the beautiful cathedral from the inside. Like most cathedrals at the present time, Rochester cathedral needs a great deal of money to put it in order and to keep it thus. An appeal by the Lord Lieutenant of Kent and the Bishop, Dean and Mayor of Rochester was recently opened with a service in the cathedral. £60,000 is needed.

ABNER

NEWS OF THE WEEK

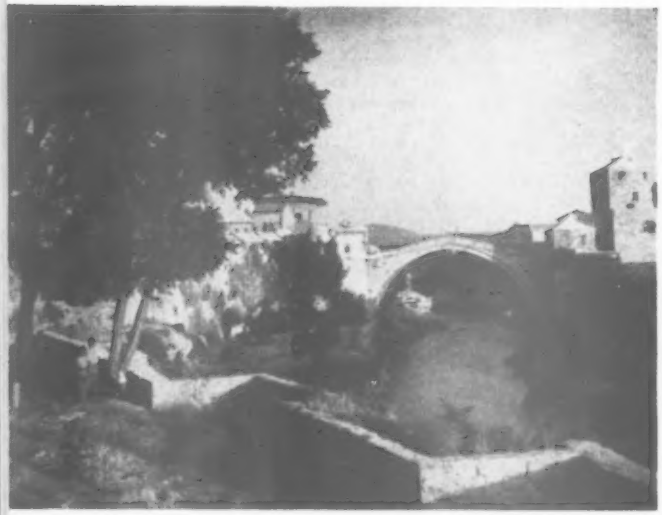
Pembroke Lodge, a graceful Regency House in Richmond Park, has been restored by the Ministry of Works as a licensed restaurant and cafeteria.

South Eastern Society of Architects

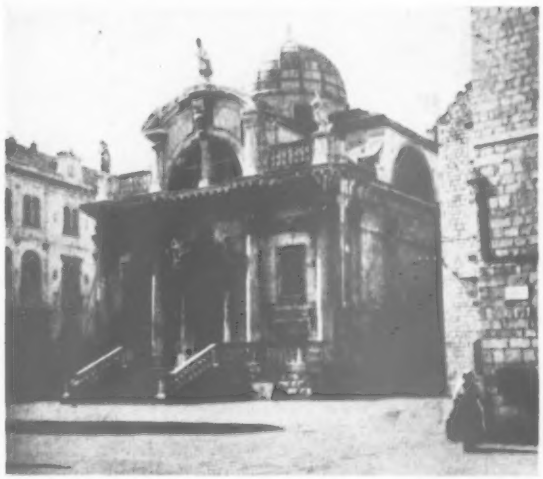
The Kingston Chapter met on Wednesday, 15th, in Surbiton, to hear a talk on Penshurst Place. Major E. R. Heathcote, T.D., B.A., A.R.I.B.A., in the absence of the chairman of the Chapter, introduced the speaker. Miss Rycroft, secretary to Lord de L'Isle & Dudley, gave an interesting and well-illustrated lecture, not only on Penshurst Place the building, but also on Penshurst Place the home, the scene of history and finally, Penshurst the estate. It is well known that at Penshurst the evolution of the English home can be seen step by step in all its variations from the fourteenth century. The Chapter intends visiting Penshurst Place as part of its summer activities and there is no doubt that every member present had his or her appetite whetted by Miss Rycroft's charming talk.

Council for Visual Education

The Council for Visual Education spent its tenth annual meeting listening to Sir Hugh Casson speaking on



Turkish Bridge at Mostar, Herzegovina.



The Baroque Cathedral of St. Blaise, Dubrovnik, designed by Gropelli.

Mosque fountain in Mostar.

Statue of St. Blaisis over the drawbridge of the Porta Pile, Dubrovnik. The Saint is always shown holding a model of the city and appears over all the entrance gates and on the forts.

Street in Dubrovnik.

PHOTOS TAKEN IN YUGOSLAVIA BY PETER A. CLARKE, A.R.I.B.A.

The New Moscow Hotel in Manege Square, Moscow. Photo by Mrs. Helen Biddle, one of the American journalists who recently spent a week in the Soviet Union.

Block of flats in Novapishanaya Street, Moscow. Each block contains 35 flats of two or three rooms. This photo was also taken by one of the ten American journalists who visited Moscow.

"Architecture and the Decorative Arts." A distinguished gathering assembled at the Housing Centre, Suffolk Street, last Wednesday, April 15, to hear Sir Patrick Abercrombie, President of the Council, introduce Sir Hugh Casson who proceeded to give "a gossip among friends." Sir Hugh's talk was, in the main, a plea to abandon the reverent approach to art—get rid of the feeling that art is something you take your hat off to. His second point was that first-rate art was a rare thing—so let's face up to the second-rate stuff—it's well worth having yet when you get tired of it you can get rid of it.

Sir Hugh said that the artist should be an arrogant rebel, high on his Ivory Tower—not to be better seen but to see better; that the Architect should bridge the gulf between artist and layman. During the discussion that followed someone mentioned the fact that the architect he was employing at the moment was definitely arrogant—if not upstage, and who was to bridge the gulf rapidly widening between *them?*

Exhibition of Hand-made Furniture

An exhibition of hand-made furniture from the permanent collection of the Rural Industries Bureau is to be on display at the Geffrye Museum, Kingsland Road, E.2, from Wednesday, April 22, to Saturday, June 20, 1953. This exhibition, which has been organized and lent by the Victoria and Albert Museum, is arranged in three rooms—morning room, dining room and living room—and comprises not only furniture but also domestic equipment such as lamps, pottery and carpets.

In connection with this exhibition a lecture is to be held at the Geffrye Museum at 6 p.m. on Wednesday, April 29. The lecture, entitled "The Arts and Crafts in Our Time," will be given by Edward Barnsley, C.B.E., consultant in furniture design to the Rural Industries Bureau. Presiding at the meeting will be Gordon Russell, C.B.E., Director of the Council of Industrial Design.

School of Architecture, College of Arts and Crafts, Birmingham: Attingham, 1953

An extra-mural course is to be held at Attingham Park, Shropshire, from May 12-14, 1953. The course is the second of its kind (the first held in 1951 was on "Light and Colour") and the theme is to be "Land and the Architect."

This highly controversial subject is too enormous to be covered comprehensively in a short course and the following aspects have therefore been selected for lectures and special study.

1. Land and matter, the structure of land masses, geology, the nature of land surfaces and the life it supports and the civilizations it has nurtured.
2. Land resources and land use: products of the earth, human activities, the relation of human industries, transport and dwellings.
3. Landscape: land forms and building forms: physical environment natural and artificial.
4. Land settlements: suitability of land areas to different types of human settlement, their development and the growth of civilized societies and cultures, both historical and contemporary.

Several well-known lecturers will be participating and a visit to the Birmingham School of Mr. Serge Kadleigh with his "High Paddington" model at the end of April is expected to add a special interest to the course.

About sixty students will attend and each year in the School is producing an exhibition panel of maps, photographs and drawings to illustrate one of the themes described above.

APPOINTMENT

Mr. Walter H. Gillespie, L.R.I.B.A., burgh architect, Alloa, has been appointed burgh architect and planning officer of Stirling.

COMING EVENTS

On Friday, April 24, the Minister of works, the Rt. Hon. David Eccles, M.P., will unveil a new view indicator on the summit of Primrose Hill which has been presented by Mr. Arthur Kenyon to replace the one destroyed during the war.

The Institution of Structural Engineers.

May 1. Annual Dinner at the Dorchester Hotel, W.1.

British Industries Fair.

April 27 to May 8. Castle Bromwich, Birmingham.

IN PARLIAMENT

Building for Production

Parliament reassembled after Easter to hear on April 14 a Budget which for the first time since 1939 contained no proposals for new taxes. It was claimed by Mr. Butler that the reliefs he proposed were designed to improve the nation's competitive efficiency, provide incentives for greater effort, and encourage private saving.

In his review of the past year he said there had been a slight fall in fixed investment—in new factories built, new plant and machinery installed, and so forth. This had been partly offset, as he had forecast, by an increase in other building work, largely as the result of the great energy and drive shown by the Minister of Housing and Local Government.

Estimating prospects for the future, he found the physical resources present for greater output—the manpower, and sufficient supplies of most raw materials. Steel, in particular, was now more plentiful, and the prospects were that, except for a few types such as steel plate, there would be enough to meet all requirements for home and export.

Productive capacity had been increasing steadily, and with continuing investment was capable of giving a much greater increase in output provided the right course was taken now. The time and opportunities must be used to re-equip and modernize factories, and to expand capacity. The licensing procedure for the building of new factories or extensions was being made easier and quicker. No manufacturer should now find difficulty or delay in getting a licence for productive work.

The need, however, was so urgent that further help must be given in this Budget. To this end he proposed to reinstate the initial allowances for capital expenditure on plant and machinery, on the construction of industrial buildings, and on mining works. The rate of plant and machinery would be 20 per cent in respect of capital expenditure incurred from that day, and for capital expenditure on the construction of industrial buildings the rate would be 10 per cent. The ending of the Excess Profits Levy was a further relief to companies; and sixpence off income tax and a 25 per cent cut in all purchase tax rates provided an incentive of all-round application.

Awaiting Decision

The Minister of Housing and Local Government was asked by Brigadier Medlicott how soon he expected to make a statement of policy in relation to the amendment of the Rent Restriction Acts, and replied "As soon as maybe, having regard to the complicated and difficult questions involved." He was also asked how soon he expected to make a statement of policy on the lifting, modifying or re-imposing of restrictions on the price and rent of houses constructed under building licences, and answered in this case "Before the end of the session." (April 14.)

Local Authority Houses

Mr. D. Jones suggested that local authorities should be circularized to obtain information about the sale of local authority houses. Mr. Macmillan replied that it was hardly worth while to circularize 1,470 authorities at this stage. Inquiries had been made informally of about 250 housing authorities of all types, and these showed that nearly 60 per cent had decided to offer houses for sale, 20 per cent were unwilling, and the rest were still undecided. Few houses had been sold yet, but several hundred tenants had asked to be allowed to buy, and he understood that many more were considering purchase. (April 14.)

Timber

The Secretary of State for Scotland, replying to Mr. Manuel, stated that of the 3,000 timber houses authorized in April last year 16 had been completed by the end of that year. Mr. Manuel wanted to know what was being done to get the remainder delivered to local authorities within a measurable time. Mr. Stuart said that last May he had stated that the aim was to complete the whole programme by the end of 1953. At the end of March this year 123 were completed and 562 were under construction. He admitted there had been delay, which he regretted, but it had been due to a lumberman's strike in Canada which had held up the transport of timber. (April 14.)

Upwards by Regulation

Mr. P. Maitland suggested in a question to the Secretary of State for Scotland that all local authorities should be required to confine their housing schemes to houses of not less than three storeys, to minimize the encroachment on agricultural land. Mr. Stuart rejected the idea, saying that he took every opportunity of urging local authorities to minimize the use of agricultural land, but obviously varying local needs and circumstances, could not be ignored in determining the type and density of houses to be built. (April 14.)

Oxford Summer School

Applications for attendance at the Oxford Summer School, organized by the Berks, Bucks & Oxon Architectural Association, now number more than for the school of 1951. It is important that further applications should be received by April 30. They should be addressed to E. Lassetter, Esq., L.R.I.B.A., Somerset House, Reading.

CORRESPONDENCE

British Architects' Conference

To the Editor of A. & B. N.

Sir,—I was interested to read your Editorial on the British Architects' Conference in this week's issue and I am sure that your words will give encouragement to those who are responsible for the arrangements. I would, however, join issue with you on one particular point; you state that the cost to a London architect attending the Conference would amount to at least £12 10s, and I agree that this is quite possible if he stays at a good hotel and attends all the Conference proceedings, including the banquet.

On the other hand, I hope your statement will not deter the many younger members of the profession from attending the Conference, which is being held in a centre close to London for the first time for very many years.

Folkestone abounds in good boarding houses and similar accommodation and I submit that it would be quite possible for a member from London to attend the working sessions and the receptions at a total cost of less than one-half of your estimate.

Surely it is essential that those attending the Conference should represent the profession in the widest sense and this can only be done if those who are even more hard up than the others are able to attend.

I am, etc.,
L. HUGH WILSON,
City Architect,
Canterbury

Testing Model Beams

To the Editor of A. & B. N.

Sir,—I am a student of the Nottingham School of Architecture and I was surprised to see that you had devoted 2½ pages of your magazine to the "Beam Scheme" recently carried out in the school. First reactions suggest that this type of scheme is the "thing" for students—after all, it is a scientific age. But because there is a feeling that we shall be left behind, we hastily and confusedly dabble with all manner of technical things which we can never have more than a limited and therefore dangerous knowledge of; the hot breath of the scientist is scorching our tender necks. But if, and I am sure it is true, architecture to-day is inferior, graceless, plain and insensitive stuff, is it not because we pay very little attention to the staff of architecture, Beauty, and instead waste our energies in dabbling and playing with fire which is not our natural bent and which can only be handled properly and expertly by experts?

I am, etc.,
T. H. BESTWICK.

OBITUARY

Mr. A. Hugh Mottram, F.R.I.B.A., F.R.I.A.S., F.S.A.Scot, a former president of the Edinburgh Architectural Association, has died at Gullane at the age of 67

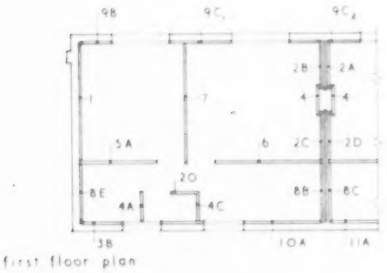
EXPERIMENTAL HOUSES AT MARESFIELD, SUSSEX, FOR THE WAR DEPARTMENT

The Directorate of Fortifications and Works

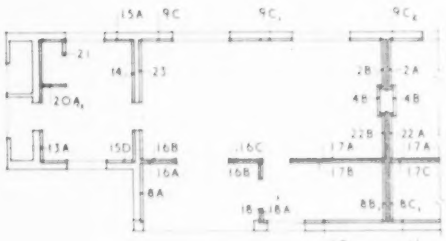
R. FITZMAURICE, B.Sc., M.I.C.E., Hon. A.R.I.B.A., Consulting Engineer

CECIL C. HANDISYDE, A.R.I.B.A., A.A. Dip., Consulting Architect

THE new married quarters at Maresfield are the War Department's latest practical experiment in quick, cheap housing. The problem was to find the best method of producing sub-tropical houses in areas with limited natural resources. The experiment, under the supervision of The Directorate of Fortifications and Works, was first thought about in the autumn of 1951. During their original investigation the B.R.S. were approached and, on their advice, R. Fitzmaurice, B.Sc., M.I.C.E., Hon. A.R.I.B.A., was retained as consulting engineer. He visited representative areas around the Mediterranean and made an analysis of labour and materials, advised the War Department on the lines their investigations should take, designed the structure and assisted in the experiments. Cecil C. Handisyde, A.R.I.B.A., A.A. Dip., was called in to correlate the structural system to a plan supplied by the War Department and to modify the design to make them suitable for use in this country. The importance of dimensional accuracy was determined and a very small tolerance established, no effort, however, was made to comply with a module or planning grid as the system of precast panels allows a high degree of flexibility.

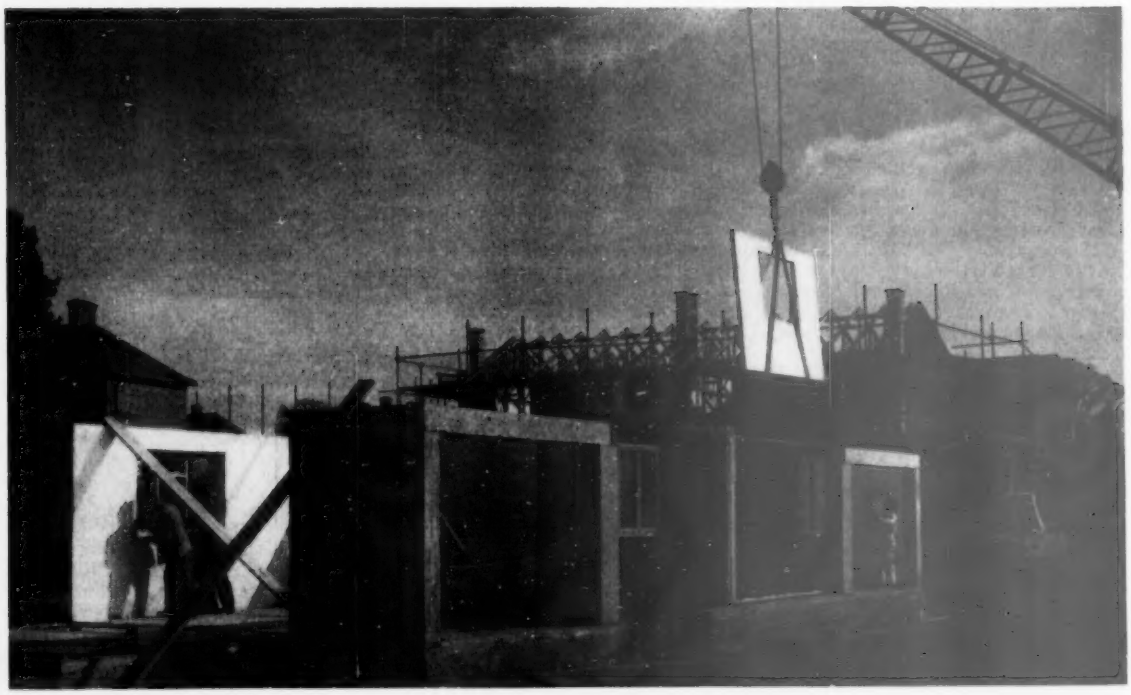


first floor plan



ground floor plan

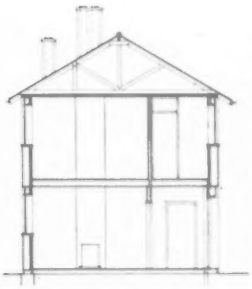
The experimental site at Maresfield.



Precast Panels

Panels of gypsum plaster are cast on the site in a simple factory in four main operations. Mixing, pouring and moulding, drying and preparation. Preparation includes drilling, fixing electric points and painting the back with bitumen; the face, left smooth from the metal face of the casting table, is prepared for final decoration. These panels, erected by crane, form the interior face of the building and act as permanent shuttering to a poured, no-fines concrete external wall.

Some 28 different sizes of panel are used in a pair of houses, many of which are repeated in the adjacent house but handed by the fixing of electric points, etc., during the last stage of "factory" production.



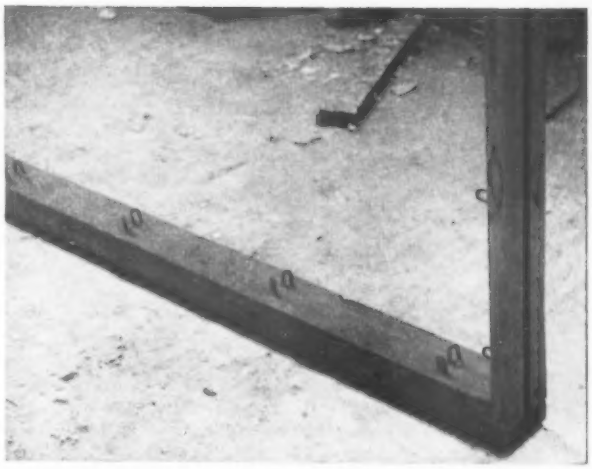
Key section and plans with panel types, letters indicate variations within a certain sized frame.

Method of Fabrication

An accurately made-up mix is prepared and poured into a rectangular frame laid horizontally on the metal-faced casting table. The panels are framed by 2½in × 1½in deal, with a ¼in × ½in groove externally, the bottom member of the frame is 2½in × 2in. The inside face of the frame is studded with steel staples to fix the frame to the panel. Immediately the plaster face is poured, scrim is placed round any openings (and all over ceiling panels), and timber moulding boards are placed on top to produce the coffered back to the panels.

The plaster has an initial set of about 10 min, after 20 min the casting table is tilted through 90 degrees and the plaster panel lifted off and placed in a drying rack where hot air is blown over. After 24 hours the panel is painted on the reverse with bitumen to prevent damp from the freshly poured no-fines penetrating the panel and marking the prefinish.

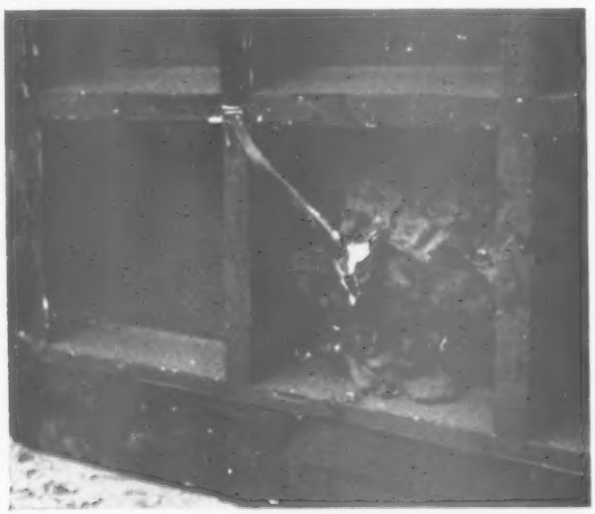
Electric wiring, using the "Octopus" method, is fixed to a point at the bottom and run up the back of the panel, neatly coiled and dropped over the top, to be fixed after casting of no-fines.



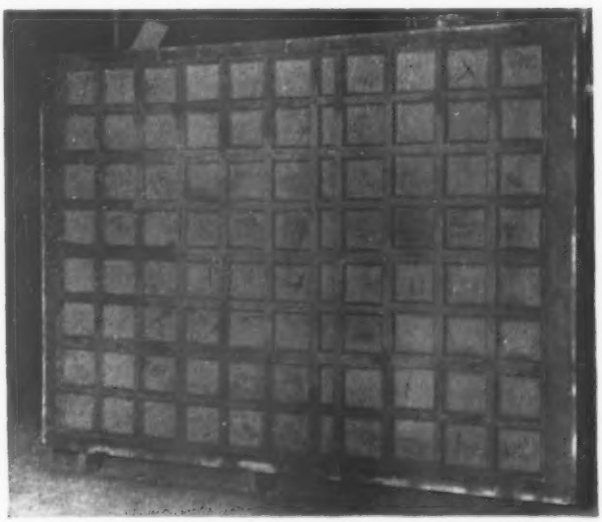
Details of preformed timber frame of 2½in x 1½in deal. Note the ¾in x ½in external groove for accurate positioning.

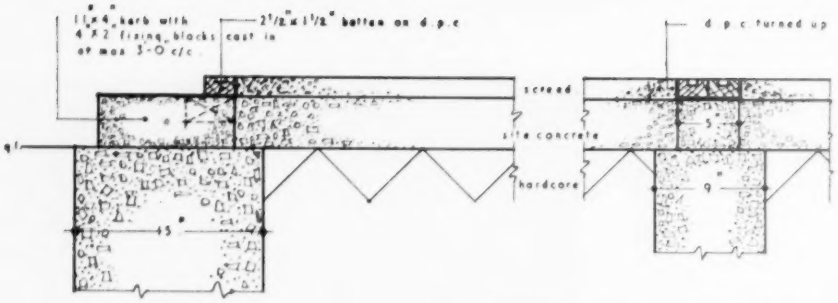
Showing an experimental ceiling panel on a small casting table. The timber mould has been removed, leaving the panel ½in thick between the 2½in ribs.

Appearance of electric light point from the back, it has been covered with plaster and the whole panel painted with bitumen.



A large panel under the hot air drier. The coffering allows minimum weight with greatest strength.





Typical foundation and levelling kerb detail.

Foundations

Normal strip foundations are formed according to the nature of the site and an accurately positioned and level bed is provided for the precast panels by the laying of a precast concrete kerb. The kerb is approximately in the centre of the strip foundations, to provide a seating for the shuttering externally and a bed for the site concrete internally. Hardcore is placed between the strip foundations and site concrete tops up the site level with the top of the kerb. A 2½in × 1½in plate with a ¾in × ½in locating groove uppermost is spiked to fixing blocks in the kerb through a strip D.P.C. which is turned up the inside face of the plate. The floor screed is placed level with the top of the plate and the D.P.C. is bonded to the bitumastic bedding of the floor tiles.

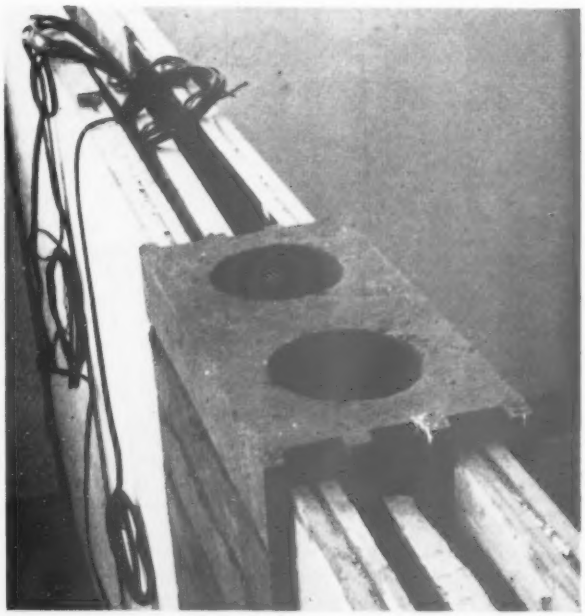
Walls

Precast panels forming the ground floor of one pair of houses to ceiling height are erected by crane. The panels are located in plan by timber tongues between the groove in the floor plate and the corresponding groove in the bottom member of the precast panel, and similarly in the vertical joints between adjacent panels.

Window and door surrounds are fixed to the panels and the external shuttering is placed in position. Pipe runs from inside the buildings are catered for by placing a length of fireclay pipe in the thickness of the wall before pouring. During pouring the precast panels are supported by wire ties to the external shuttering and strutted at the top.

A dry mix of no-fines concrete is poured up to lintol level where a ring beam is formed of reinforced dense concrete.

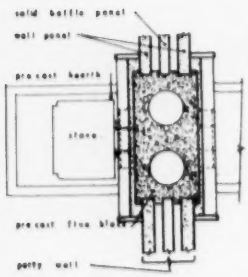
The ring beam is set back 2½in from the face of the no-fines and is covered by the second lift. After the first floor is cast the first-floor walls are cast in the same way. The walls are rendered externally with a textured finished.



Precast double-flue blocks in the party wall, note the coiled wiring to be joined to a junction box.

Party Wall

The party wall, separated into two halves by a precast flue block common to both houses of a pair, is made up of two precast plaster panels facing the interior with a third baffle panel in between.



Plan of flue block arrangement with solid fuel stoves.

Junction of three-leaf party wall with internal face of outer wall.

Internal Partitions

Internal partitions, which are load bearing, are made up by bolting two precast plaster panels together with an *in situ* r.c. spreader beam over the top.

First Floor

The first floor is made up of precast concrete beams supporting precast gypsum panels, similar but smaller than the wall panels. The whole is made solid with *in situ* concrete, screeded and finished with floor tiles. The beams span between external walls and internal partition walls.

Fittings

To support objects normally cantilevered from a wall the method used is to provide a supported timber back plate. A light metal framework is made up in the shape of an "H," the four ends are turned through 90 degrees on a jig and threaded. The same jig is used to position four holes drilled through the timber back plate and through the plaster wall panel. The four threaded ends are then passed through the panel from the outside and the timber back plate is bolted on. Suitably propped during pouring of the no-fines external wall, the framework is cast in solid and spreads the load.

All the plumbing is preformed and was designed by F. L. Barrow, M.Sc., F.R.San.I., copper pipes arrive on site already bent and only require connecting by cold jointing methods. The one pipe method is used.

All light switches are the ceiling cord-pull type to economize in wiring.

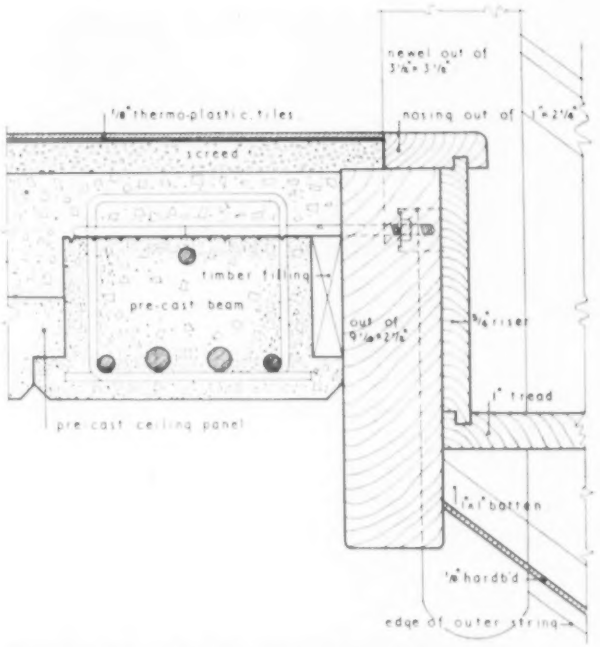
Precast Work

In this prototype design there are several precast units including flue blocks, floor joists, post and lintol surround to the veranda, etc. It is intended in future experiments to reduce the number of precast units to a minimum.

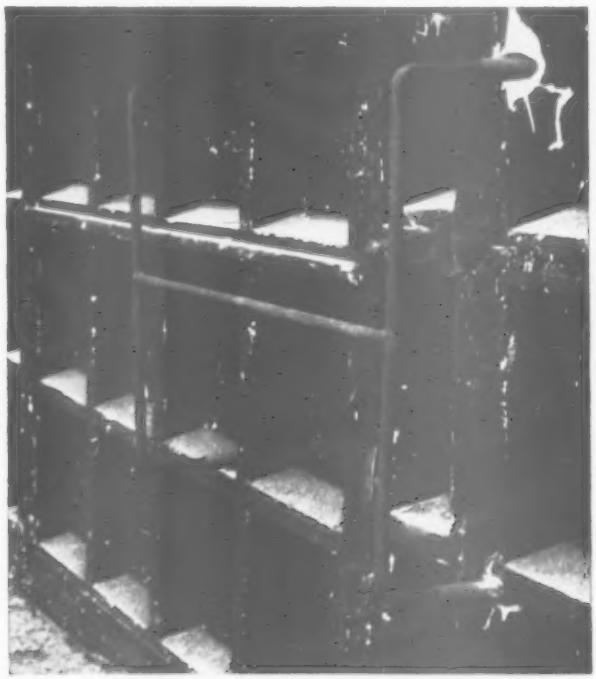
Sub-tropical Amendments and Experiments

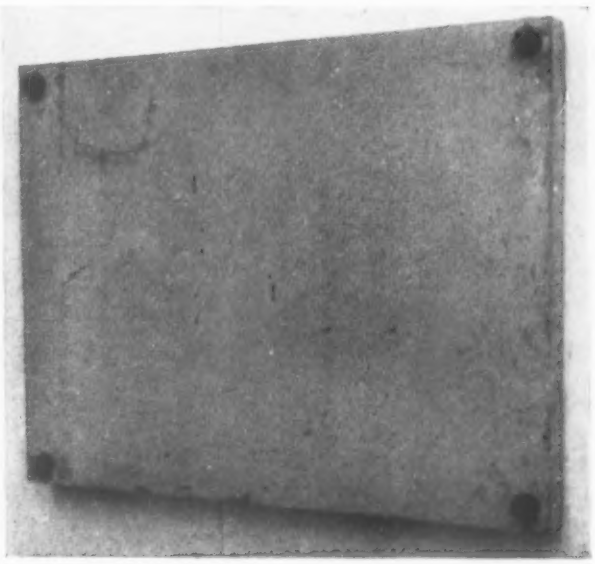
The prototype houses erected at Maresfield are necessarily modified for use in this country, when erected in sub-tropical climates the floor to ceiling heights will be raised, electric points will be provided in the ceilings for fans. The wall construction will include ventilation louvres.

Future experiments may include a plaster ceiling panel to replace the precast floor beams. Gypsum no-fines concrete, a cast *in situ* trimming to the veranda, and a no-fines party wall with a traditional brick flue are also due for investigation.

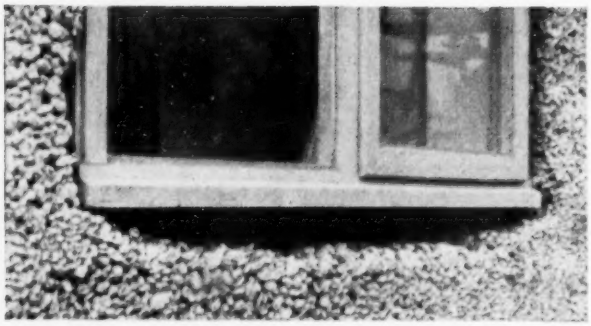


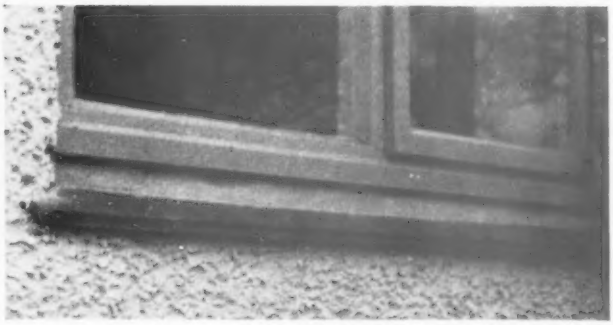
Quarter full-size detail of floor construction and trimming to stairs and stair well. The stairs are preformed in three separate sections.





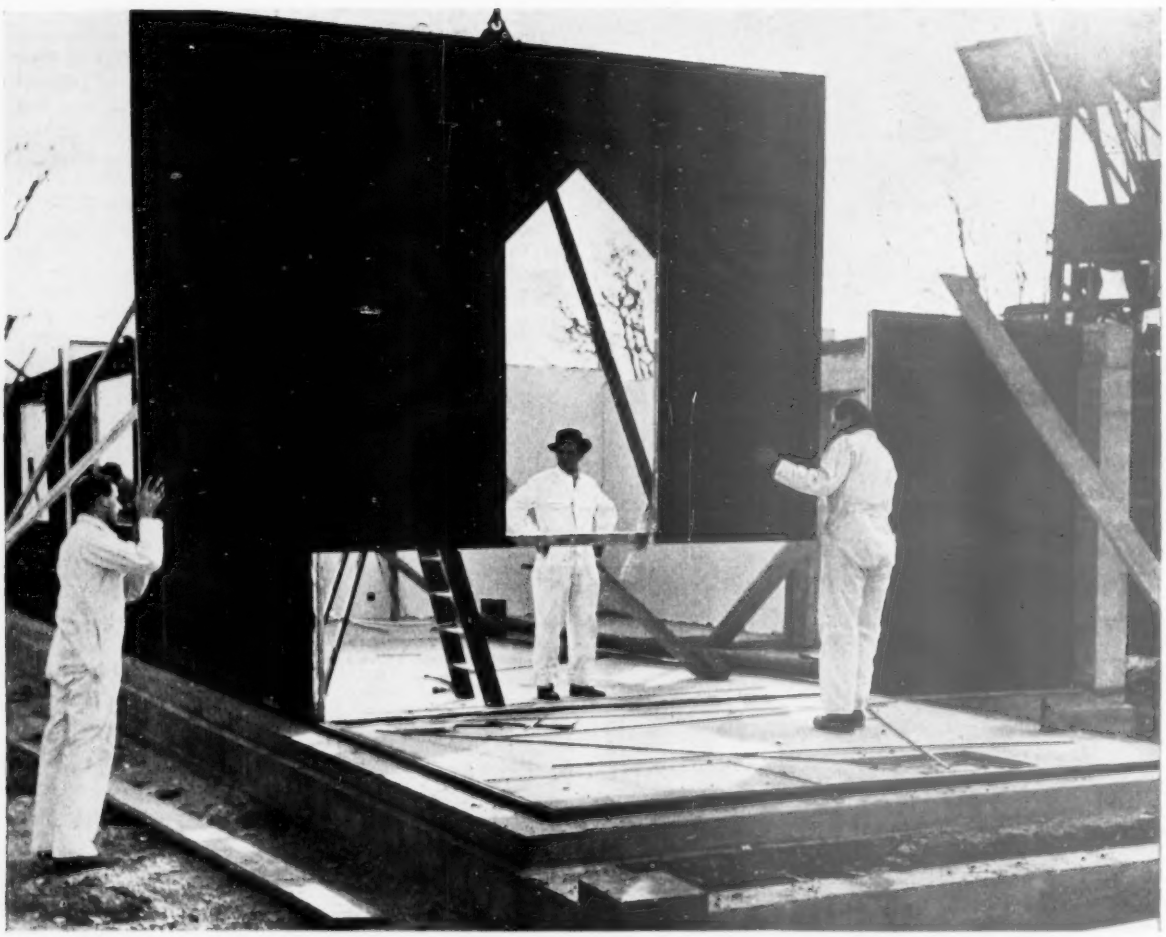
Back board used to support sink or basin and frame of steel rod to spread load from the back board to the no-fines external wall.





Sill after pouring of no-fines concrete and final appearance of window with a tile sill and external finish.

Houses at Maresfield



This picture shows a large precast panel, incorporating a doorway, being lowered into position by crane. The precast concrete levelling kerb can be seen covered with a strip D.P.C. which is held in position by a locating battern. Timber tongues used in the positioning of panels can be seen on the floor.

FIELD PROJECTS AND EXTRA-MURAL STUDIES

A paper read by CECIL STEWART, D.A.(Edin.), F.R.I.B.A., A.M.T.P.I., A.I.L.A., at the Short Course on Architecture on April 15 at Brighton

I SHOULD like to consider first the purpose of extra-mural studies. It is certainly not, as the title might suggest, the provision of more walls; as you know, with the development of framed structures, the wall in architecture has become a rather indeterminate thing. Nor do extra-mural studies simply mean activities outside the walls of a School of Architecture. They are rather those studies which help to break down the barrier surrounding academic study. Just as the wall in contemporary design has become little more than a light portable partition, so the wall of a School of Architecture should not surround an ivory tower of exclusiveness from the world outside.

In this talk I want to consider methods by which this exclusiveness may be avoided, and ways in which students may be introduced extra-murally to realities of architecture and building.

Naturally I am able to mention with any pretence to authority only those methods which I have tried to adopt in Manchester; and of course in Manchester, with a rainfall of 36.66 inches a year, the difficulty of undertaking field projects and extra-mural activities is much greater than in this sunny south. The weather in Manchester does, however, make the student deeply conscious that the primary function of architecture is to keep it out.

I suppose the most obvious extra-mural activity undertaken by architecture students is measured drawing. Now the purpose of measured drawing has become a little obscure. In Victorian times its purpose was crystal clear; a systematic measuring of buildings provided the student with a vocabulary of useful details which he could apply to his designs in all manner of curious ways. The R.I.B.A. recognized this when it evolved its examinations in Special History. Through this examination the student was able to show his virtuosity in the style in which he intended to practise.

To-day things are not so simple. Measured drawing has become, I suspect, largely an exercise in surveying and draughtsmanship; and I am not convinced that ancient monuments are the most suitable subjects for this exercise. I appreciate that it may be possible to link such studies with all kinds of fascinating historical research, but as long as measured drawing is an activity undertaken in the very early years of a student's training, this approach is liable to be exceedingly superficial. I am not at all sure that I should not prefer a reversion to the Victorian practice of encouraging the student to measure buildings of the style in which he intends to practise—that is, the contemporary style. The R.I.B.A. has taken the first step by recognizing the 19th and 20th centuries as a reasonable field of study for Special History. It would seem logical, too, that history and measured drawing should be linked. I wonder whether I should not prefer a measured drawing of the west front of the Royal Festival Hall to one of the west front of Westminster Hall; or a half-inch survey of the latest plumbing circuit to a detail drawing of an eleventh-century piscina in the parish church of Nether Wallop.

I do not want to imply that I believe that historical studies should be discarded. Indeed, I hope to show that historical studies might be an extra-mural activity rather than an intra-Bannister Fletcher preoccupation. For some time I have felt that it must seem rather strange to the young student in Manchester to be informed at the outset of his career that in Babylon, some 2,800 miles away, and 5,000 years ago, they constructed a thing called a Ziggurat out of sun-dried bricks; or that at Karnak on the Nile, with unlimited slave labour, a temple was built that took nearly a thousand years to complete. Such information is liable to be too detached from reality. It encourages, if we are not careful, a tendency to regard the architecture of the past as the only architecture that matters. I believe that the study of history is getting a little befogged by antiquarian prejudice. The all-important purpose of too many schools, as far as the teaching of history is concerned, seems to be to develop the ability to distinguish between the early curly style and the late-straight.

Now the student, of course, knows that the provision of dwellings and schools and factories is the true function of the architect to-day, and therefore, with much of our historical teaching, we are setting up a conflict before he has reached his second year. On the one hand we have the history teacher, filling the student's mind with a curious mixture of socio-historical data; and on the other, the teacher of construction and design, concentrating on practical design problems of to-day.

The gulf between the two might, I believe, be spanned by extra-mural study—by the study of architecture which is the environment of the student. A tour of any of our larger cities provides an astonishing range of architectural styles of all ages and places. In Manchester we would start at a pub called "The Pyramids," built in the Egyptian style, and progress through the Greek architecture of Chorlton Town Hall to that Roman Pantheon which we call the Central Reference Library; then on to the Norman castle whose crenellations and machicolations defend Martin's Bank, and past Ye Tudor Timothy White's and Ye Olde Prudential Buildings, returning at the close of the day to the portals of the School of Art itself, built in that curious Venetian Gothic which Ruskin loved so well. Next day there would be an excursion to the French chateaux and Italian villas of upper-class Didsbury, a tour of bijou Jacobean suburbia, and even a Chinese digression at Belle Vue.

Now all this can be great fun, and extraordinarily illuminating to the student, especially if, at the same time, he is encouraged to exert his critical faculties at each point. It was Mr. Clough Williams-Ellis who, in a paper read to a Teachers' Conference at the R.I.B.A., laid down the kind of catechism which I think can be usefully applied for such excursions. It was designed, as it were, for application by a child of twelve, and I have found it an admirable basis for criticism. Here it is:—

1. Are you practical? That is, are you an efficient house, shop, school, factory or church? Can a family be brought up in you, or cheese sold, or children taught, or boots made, or services held in you with convenience?

2. Are you well and truly built, solid, safe and sound?

3. If you are new, are you going to look shabby or still raw in ten years' time, or have your materials been so wisely chosen and used that the years will pleasantly mature and mellow you?

4. Are you beautiful, or at any rate to me, or did you seem so to those who built you; and if so, why?

5. Is there any special idea about you? Are you vigorous, or restful, long-strung-out (horizontal), or all up and down (vertical); in short, have you any special character, and if so, of what kind?

6. Are you a good neighbour? Do you love the Tudor inn next door, the Regency chemist's shop opposite, the pollarded elm trees or the church across the way? Do you do-as-you-would-be-done-by? Do other buildings and trees and surroundings near you generally gain or lose by your presence? In short, have you civilised manners?[1]

Questions like these will naturally lead on to more detailed and technical queries. For example: What is the relation or proportion between wall surface and windows? What kind of construction has been adopted? Would it look better if it were painted differently, or built of different materials? And so on.

Would you agree with me that that kind of thing could be usefully adopted? Do you believe, with me, that it is this critical approach that is lacking today, that it is worth while to stimulate an interest in architecture over a far wider field

[1] Journal of the R.I.B.A., February, 1944

than is provided by mere historical study, and that only through some such method can we hope to create a genuine interest in the architecture of the past which may ultimately lead to genuine historical research?

The second field of extra-mural activity which I regard as being of the greatest importance is the visiting of buildings in progress. I do not mean the occasional visit to some work which by chance is nearly complete, generally at some particularly inconvenient time in relation to the School syllabus; I mean the systematic study of the method and procedure of building. Too often I have found that while students can draw, with apparent facility, say, a section through the head and sill of a window or through a timber staircase, they have little or no knowledge of all the different trades that may be involved and the order in which they work, or of how the whole complex structure is actually assembled and fitted in the shop and on the job. To gather this kind of information, it is necessary to visit a job at regular intervals, to study the actual site conditions under which work is carried out. This means investigating the whole organization of a job, and should lead to an understanding of the need for dove-tailing the various trades into a programme of work. The student will learn the importance of the delivery of goods to the site at the right time, in order to avoid hold-ups on the job. He will see how the use of mechanical equipment can affect the man-hours required, and notice the extent of supervision given by the architect, the quantity surveyor and the building inspector.

Now, from my limited experience, this kind of systematic study can only be undertaken with the help of the local authority's architect. There are few private architects who can be expected to allow a horde of students to interrupt the progress of a job every two or three weeks. But without these visits one cannot help feeling that any system of architectural education can rightly be accused of failing to appreciate the practical requirements of the building industry today. In Manchester, thanks to the co-operation of the City Architect and the Housing Director, I feel we have been particularly fortunate.

A comparison between an architect's working drawings and the resultant structure is in itself immensely revealing. Through systematic visits the student is not only able to follow each stage of development, but discovers the amount of tolerance that is required in constructional works on the site, and therefore learns the extent of expected accuracy. He is required to record the influence of the weather on the work in so far as it affects building operations; he learns how rain may prevent the progress of outside work, and how frost can almost bring site work to a standstill. As I implied earlier, there is a great deal of weather in Manchester.

The student records the numbers of men employed in the different trades at each visit. He makes notes of constructional methods adopted, and occasionally finds, to his surprise, and for the good of his education, that these do not always coincide with the textbook illustrations which he had previously regarded as gospel. He discovers the difference between, and the need for, both shop and site work, and through special visits to a joinery shop sees the production of the various elements—doors, windows and the like—which later are erected on the job.

Finally—and we have not yet put this into practice—he should make a visit a year later to meet the family in the house, to see how the structure is meeting the purpose for which it was designed; whether the chimney draws well, whether the house is dry and comfortable, or whether the paintwork is scaling and the brickwork effloresing or the damp creeping in in awkward places. All these things can and should be learned, in my view, at an early stage in the student's career if he is to fulfil his duties to society.

So far I have considered only those studies which might be regarded as extra-mural research activities. I should like now to pass on to the major task of design, and to consider one particular kind of project which, in my opinion, confronts the student with realities in a more vivid and practical manner than any other in our syllabus. It is important because it ensures that the student is made aware of the need for a careful survey as a preliminary to design; and while the programme is concerned chiefly with physical and architectural planning, it is intended to indicate at the same time the scope and purpose of town and country planning, and to show how architects and architecture may fit into a planned environment.

It is necessary in this exercise to find a village or small community, reasonably accessible, and one in which a fair case can be made for the establishment of some small industry. The students are then advised that in the vicinity of the village of X it has been decided to establish a canning factory, or a milk-bottling factory, or some such industry, and that this will necessitate the immigration into the village of, say, 100 new workers. The way in which this information is presented should be as startling as possible—as though it had come upon this peaceful village like a bolt from the blue, or rather a Bulletin from the Board of Trade. It should be calculated to produce in the students' minds an immediate reaction of horror, leading to discussion and argument. It should, however, be suggested that this new factory might bring new life to the community—alternative employment for the villagers, perhaps justifying some new shops, and even making possible a new school or village hall. That is the kind of thing the students will have to investigate. For two whole days the students will examine the village, working in groups and studying particular aspects of the problem. This is the survey stage.

The first group studies the physical setting of the village—the geography and geology of the area, contours, farm units, footpaths, woods—and from this should determine those areas which for various physical reasons seem unsuitable for building purposes.

The second group studies the public utilities—gas, water and electricity; the existing provisions for drainage and sewage disposal and the possible limits of future extension; the general distribution of communications and transport facilities, and any danger points in the road system that require attention.

The third group is concerned with the social background and the educational and shopping services which exist. It must seek the co-operation of the Vicar and the schoolmaster if this part of the survey is to be effective. This survey should include a study of the condition of existing dwellings, and should find out whether there is any overcrowding or if there are any condemned buildings in the area.

The fourth group studies the history and architecture of the area—the growth of the village and whether there are any ancient buildings worthy of preservation. It must consider the architectural characteristics of the village, local traditions and building materials.

The fifth group studies the landscape; identifies and locates all the important tree and shrub groups which, for the sake of amenity, ought to be preserved. It must also look for eyesores which ought to be screened or treated in some way.

The sixth and last group tries to find out the practical building problems in the area; the amount of labour available, any local skills and traditional building techniques, and the local byelaws or planning restrictions. It must also obtain information on the costs of building materials and labour.

During the following two days all this material has to be presented in a form which can be usefully applied by the students themselves. A representative from each group is required to explain to the Year the results of his particular group's survey, so that every student is made aware of the most relevant features which will condition his ultimate design.

At the conclusion of this stage each student is required to produce a master plan which will show not only the proposed area or areas for new housing, but also the location of the factory, modifications to the road pattern, and any other additional buildings or planting which it is felt may be desirable, as a result of the survey. This is presented as a sketch scheme, which is criticized by the leaders of each group from their own particular points of view. The whole of the project should be covered comfortably within a fortnight, and the student should now be in a position to undertake the design project.

This is much more than a design for a housing scheme in the traditional sense. It should provide opportunities for

the consideration of site procedure and development. The design problem may include not only dwellings for families of different sizes and composition, but homes for old people; the allocation of sites for private enterprise; temporary dwellings, if considered necessary or desirable, and even, perhaps, a number of permanent prefabricated houses if it is felt that the type selected will fit into the general environment.

All this has to be worked out, taking into account the available man-power and the times at which the different stages of the work can be undertaken. The student will have to determine when the land should be acquired, when any planting should be done, when new services should be laid and roads constructed. He should be able to present plans showing the expected appearance of the village, say, two years, five years, and ten years from now.

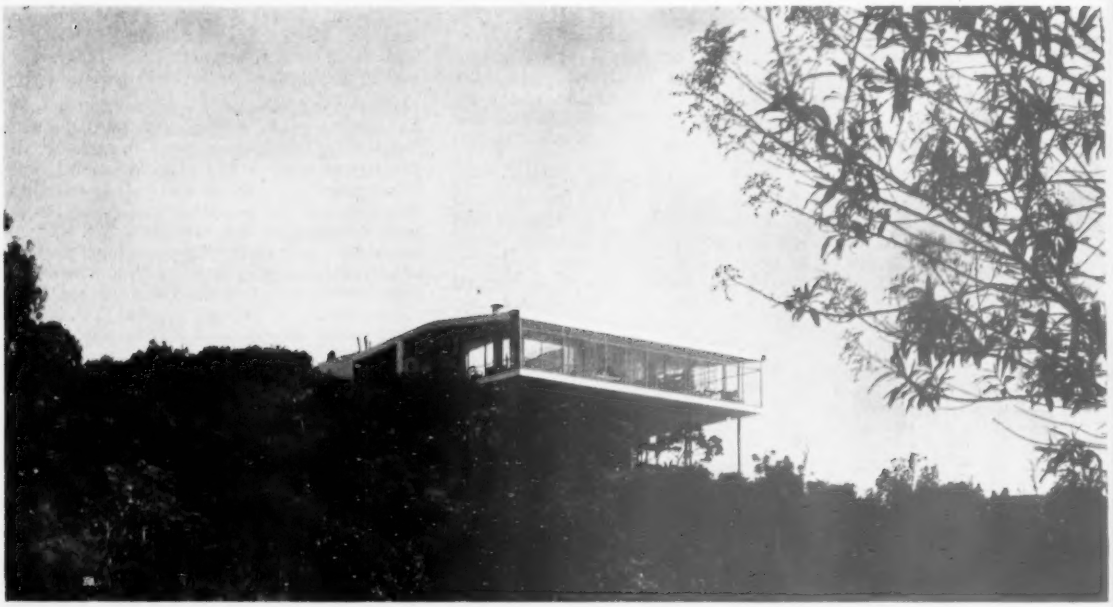
It is my firm belief that studies of this kind can provide a far more practical training than one which is confined within the walls of a School of Architecture. I know that to those of you who are teachers in Listed Schools such projects are scarcely possible. Studies in the final years are so defined according to a list of testimonies laid down by the R.I.B.A. that it is well-nigh impossible to initiate new projects. To me, that is the most tragic feature of the present system. The teacher in a Listed School has to conform to regulations which, however well meaning, cannot permit freedom to devise schemes such as I have outlined here; nor—and this to me is disastrous—does the testimony system allow the student to design buildings for a site which he can visit and study at first hand. Instead, the student is provided with an incomprehensible plan which has a few circles drawn upon it and a suggestion that trees should be preserved. There is often no clue as to what kind of trees they are; whether they are beautiful trees, or trees one would like to sit under, or trees that are great and tall, or just stubby old things that will die anyway in a few years.

Do not imagine that I want to destroy trees; but too often, I feel, we regard a tree as some kind of a sacred relic. That "only God can make a tree" is perhaps true, but man can plant trees, and he can plant them in positions which may enhance a design; but he can only know where to plant them when he can see and study the lie of the ground and capture the spirit of the environment. I pin my faith on the committee now reviewing the whole matter of architectural education, and pray that in its deliberations it will devise some system which will allow a teacher to provide the education which he believes in, and which will make possible extra-mural as well as academic studies.

It is the exclusiveness of our present architectural education—its intra-mural nature—which, to my mind, is causing the present gulf between the people and contemporary architecture. With each advance that is made by the more progressive architects, this gulf is widened. Even if we consider the advance a progress, it is none the less a progress that leaves the people far behind. When a new experiment in design is made, one critic will say that it is truly imaginative, another that it is structurally significant; but few will suggest that the design is likely to be popular. There is, alas, an ever-widening breach between contemporary ideas in design and general public appreciation, which is not likely to be closed until there is a development in extra-mural studies that will make the student aware of the public needs, and the public aware of the architect's aims.

UNIVERSITY OF SHEFFIELD ARCHITECTURAL COMPETITION

Aerial view of the University including the site for the new buildings which are the subject of the competition announced in A. & B.N. of February 19.



Architect's Own House

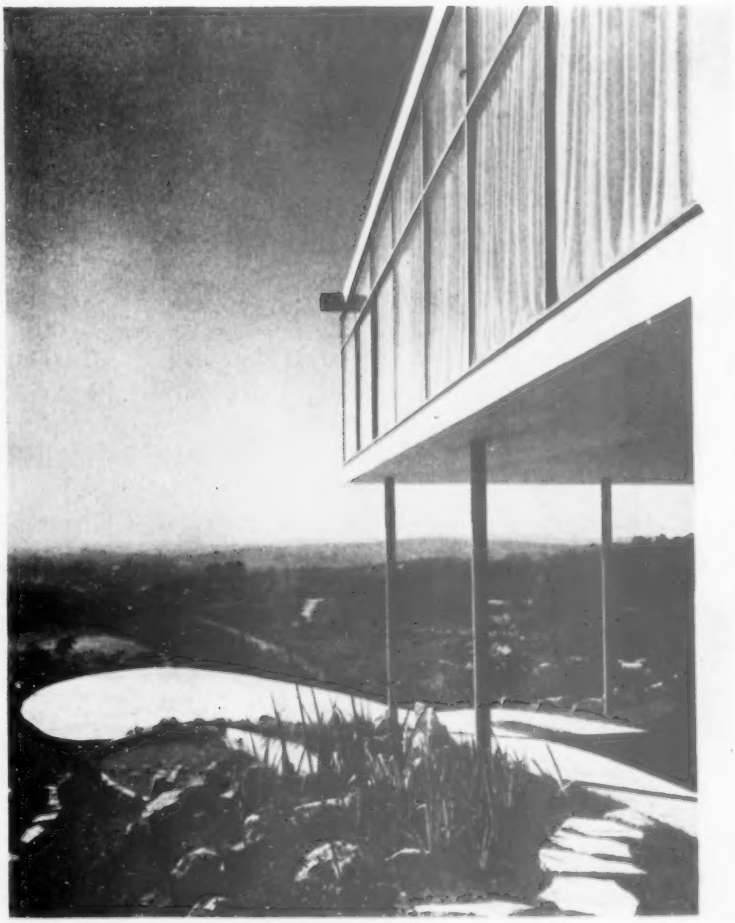
SAO PAULO, BRAZIL

designed by LINA BO BARDI

THE structure in Manessmann tubes supports a light platform of reinforced concrete, a wall of glass runs round three sides of the house ; the roof, a very thin concrete slab covered with Eternit and insulated with glass wool, sufficiently inclined to throw off water, rests on the same Manessmann tubes. The extension of the glass wall at the sides is made of double iron-plate with glass-wool insulation ; the iron-sheets are painted in bright red like the gutters. Access to the house is by means of a steel staircase with treads of natural granite slabs.

An internal area, a kind of suspended inner court, allows cross ventilation during hot weather. The back of the house which rests on the ground is made of masonry and concrete ; a long garden closed on one side divides the service quarters from the front part : those are connected by the kitchen. The kitchen, covered by a terrace, has a roof garden with indigenous plants which do not require excessive care.

The South-South East aspect has allowed the elimination of shutters and built-in sunblinds ; the latter are definitely not suitable for the rainy season



View of the house from the road. The steel columns are 17 cm. diam., painted light grey. Rain is carried off the roof by a gutter with open spouts at each end, painted red. The filler-panels of iron are also painted bright red. The steel staircase is painted grey, treads are granite.

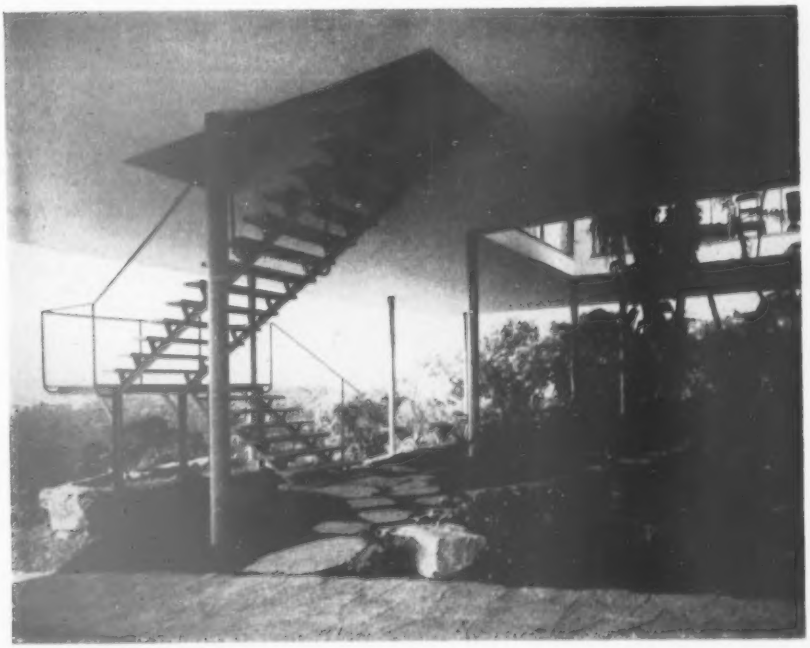
Beneath the house there is a garden of tropical plants.

since the rays of the sun prevent the forming of mould. Protection from sun-rays in the morning is given by white vinylite curtains.

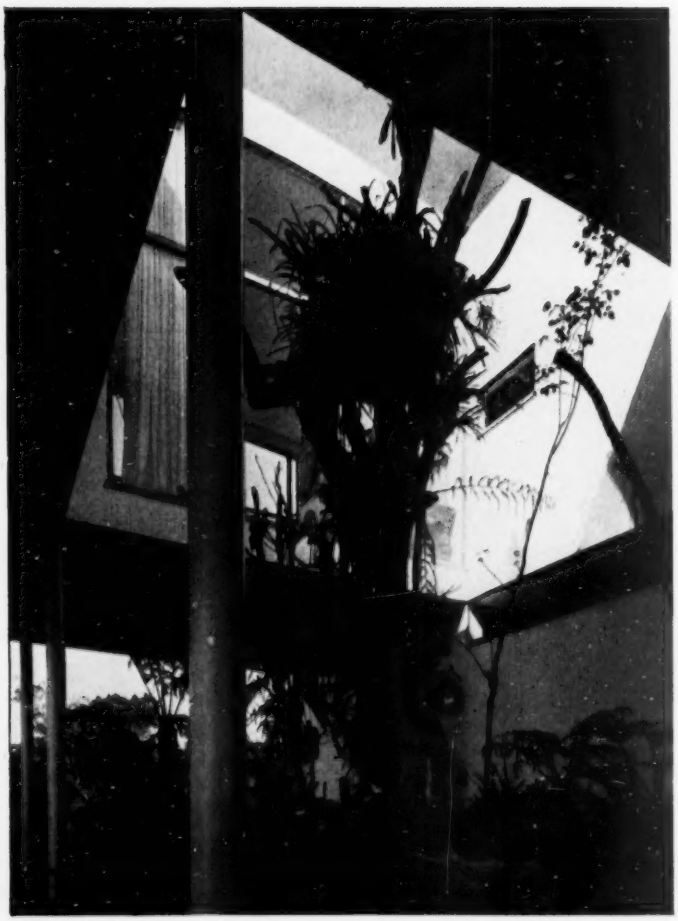
This house seeks to be in direct contact with Nature, opposing elements of nature with the least means of protection ; it seeks to follow the natural order of things with a clarity different from the enclosed house which tries to forget rains and storms, and fears strangers.

In a way, this residence is controversial, as all buildings made by representative architects should be, especially when not bound by the client. Almost all contemporary architecture even when executed by outstanding architects denounces ideas and tastes of the owner, mostly with no bases at all. Therefore, when an architect of the new architectural generation makes a mistake, it is almost always due to the client's interference. In this case it was different, the client and architect being the same person.

LINA BO BARDI



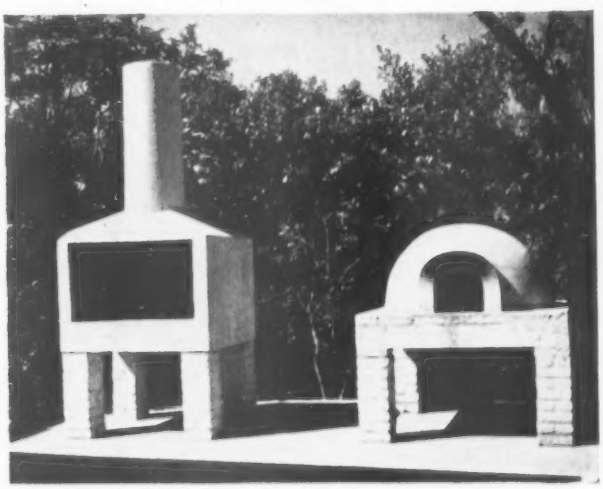
The Living Room: All metal is grey, the floor is of pale-blue glass mosaic. Fireplace in grey Brazilian granite.



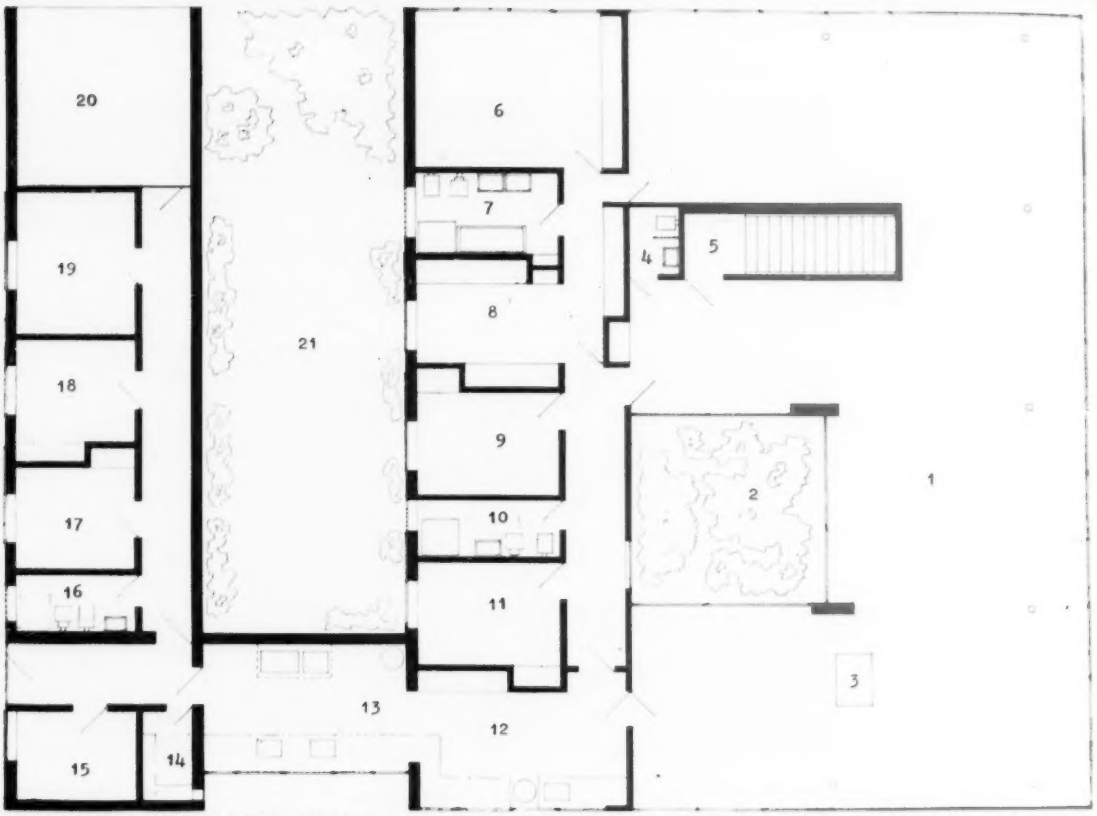
The internal court, with orchids, Bromeliaceae, Philodendrons and tree ferns.

House at Sao Paulo

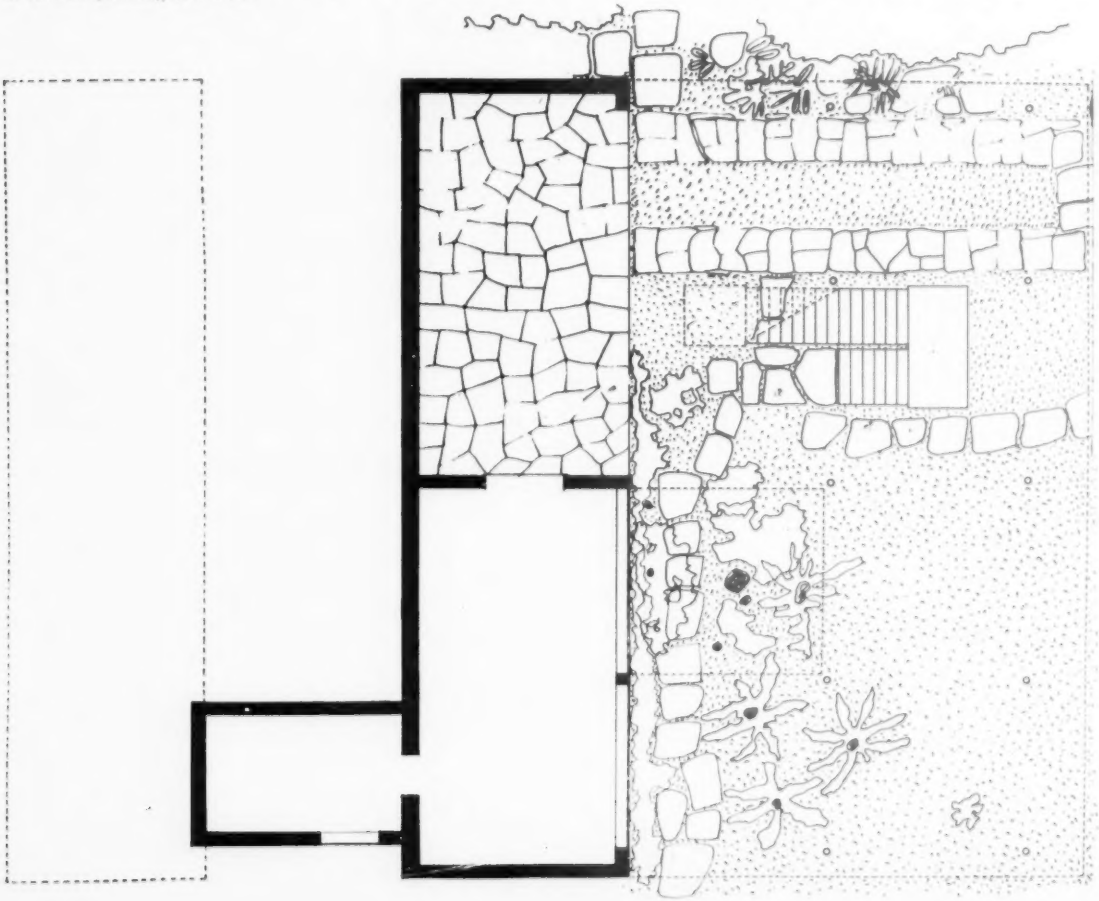
The kitchen sink is in stainless steel. The outer wall panels are in sheet iron painted blue.

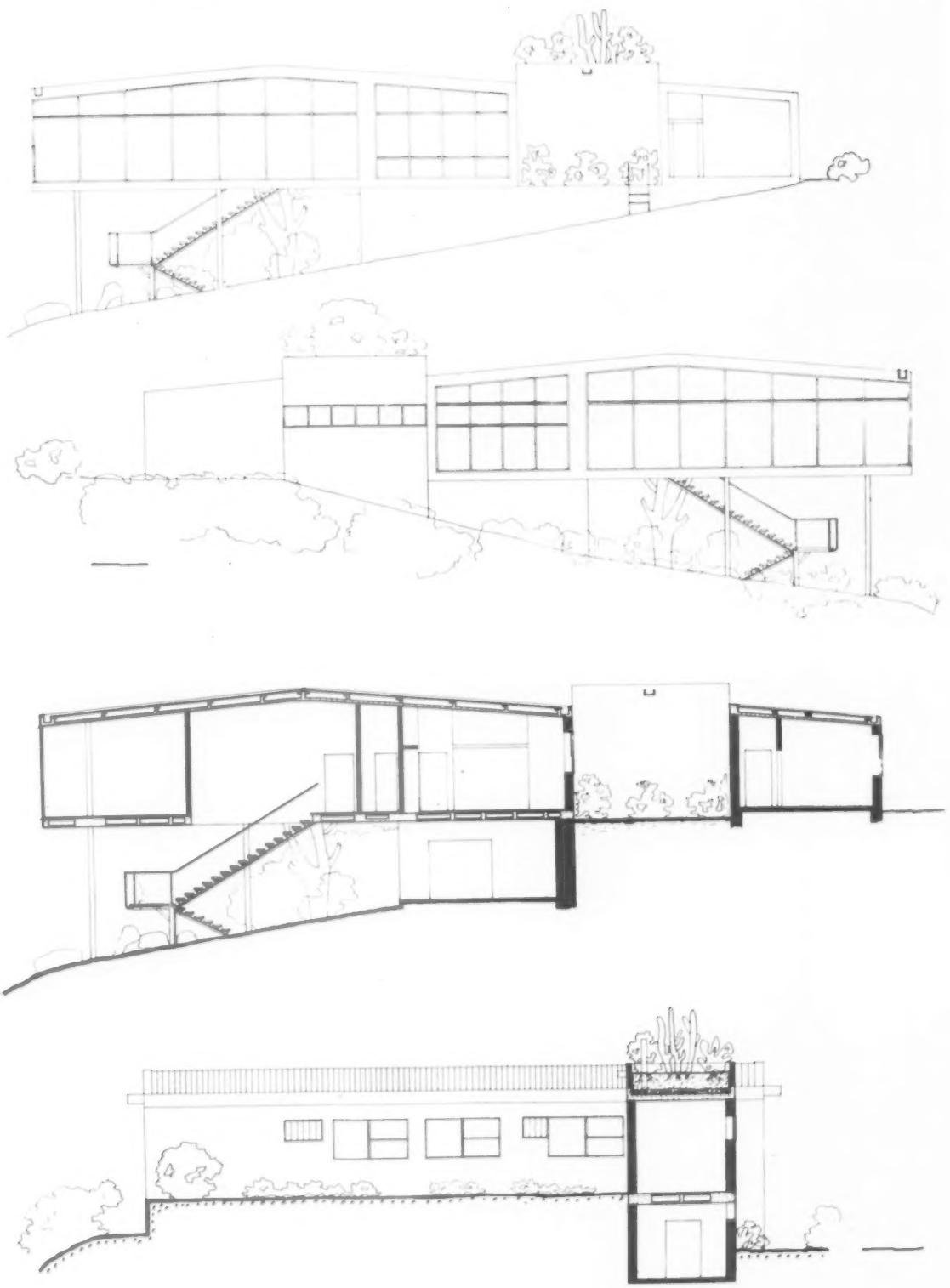


Above: Outdoor bread and meat ovens. Left: Another view of the kitchen, which has a black glass-mosaic floor. A deodorizer is fitted in the hood over the cooker, and a garbage chute discharges into an incinerator below.

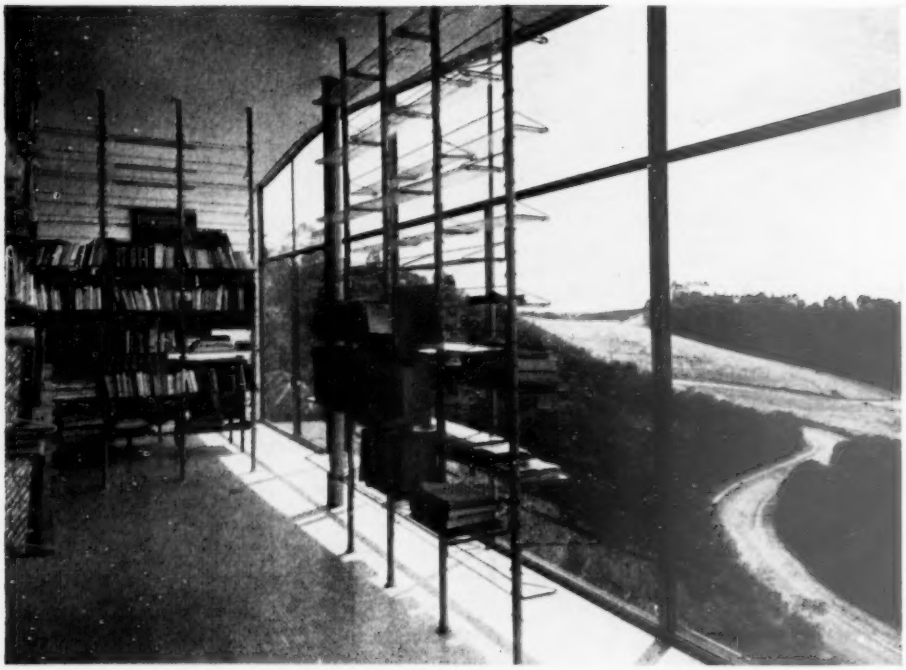


1 LIVING-ROOM, 2 SUSPENDED PATIO, 3 FIRE-PLACE, 4 W.C., 5 ENTRANCE, 6 BED-ROOM, 7 BATH-ROOM, 8 WARDROBE, 9 BED-ROOM, 10 BATH-ROOM, 11 BED-ROOM, 12 OFFICE, 13 KITCHEN, 14 CELLAR, 15 SERVICE-ROOM, 16 BATH-ROOM, 17 SERVICE-ROOM, 18 SITTING-ROOM (SERVICE) 19 LAUNDRY, 20 TERRACE (SERVICE), 21 GARDEN.

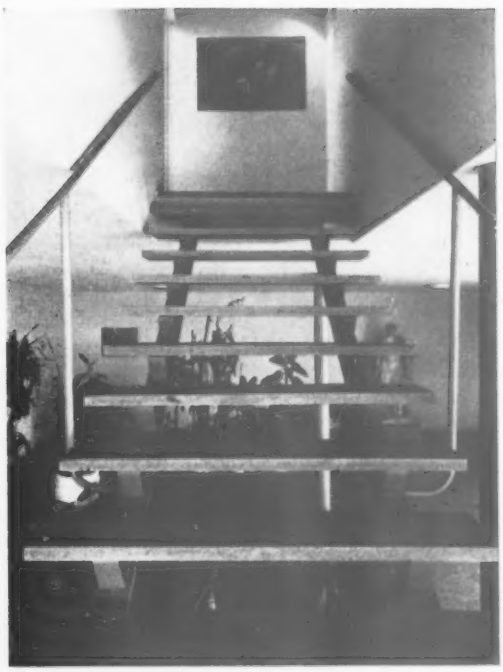




HOUSE AT SAO PAULO : ELEVATIONS AND SECTIONS



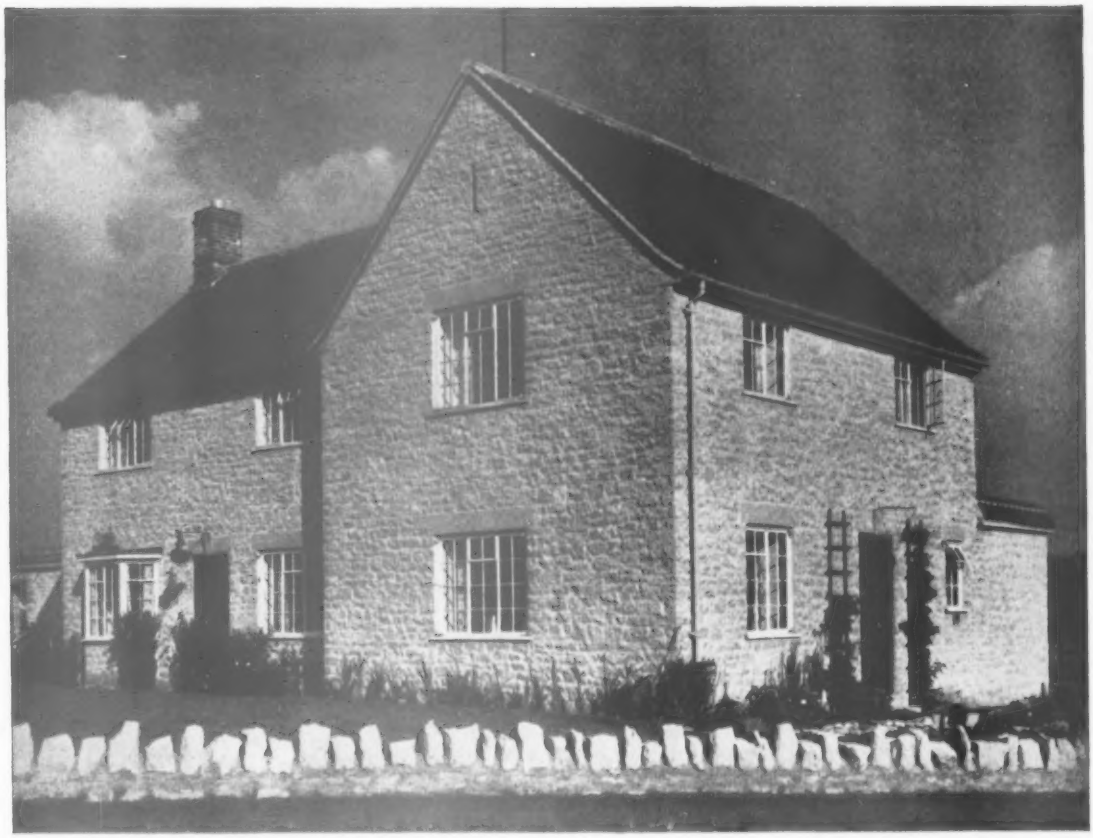
Above: View of the Library, which has steel and glass shelving. Below: The glass wall of the Living Room with its wide view over the countryside.



View up the approach stair. The treads are in grey Brazilian granite. The wall mosaic is by Georgio de Chirico and behind the steps, can be seen a fifth-century Greek statue.

House at Sao Paulo

ARCHITECT: LINA BO BARDI



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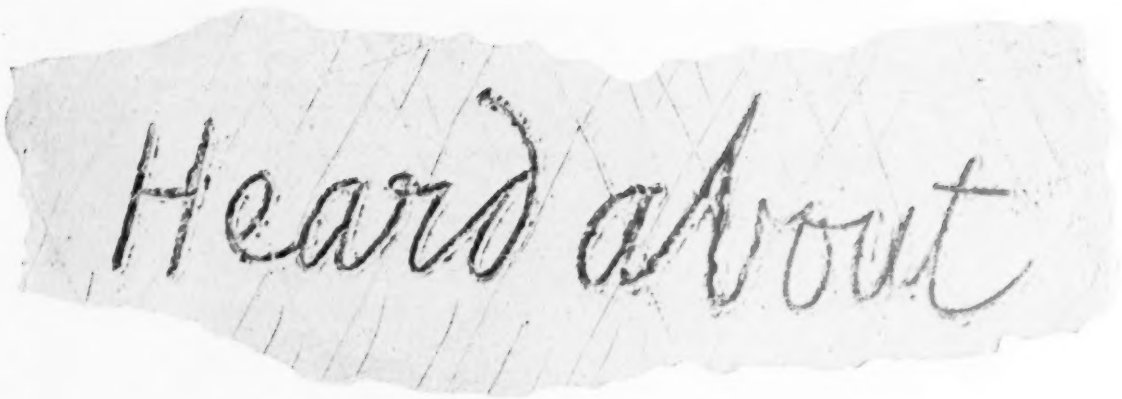
SMETHWICK, BIRMINGHAM AND 17 BERNERS STREET, LONDON, W.1.
LEEDS: PROVINCIAL HOUSE, ALBION STREET



"A lot of architects seem to be specifying Carlite pre-mixed plaster instead of ordinary plaster these days."

"I'm one of them. In fact for my kind of work Carlite looks like superseding the old types of plaster altogether."

"For instance?"

"For instance Carlite is pre-mixed plaster with an aggregate of exfoliated vermiculite. You get all the advantages of vermiculite and as every batch that comes out of the factory is carefully tested you can be sure of the standard."

"You mean you know in advance there won't be any trouble about specifications being met?"

"No trouble at all. Another big point is that Carlite has very remarkable strength combined with lightness. That gives me so much more scope in designing."

"All this ought to be good news for contractors as well as architects."

"Naturally. Carlite makes specifications simple to meet, needs no mounds of sand lying around on sites and has very high resistance to cracking."

"I can see I'd better look into Carlite before I get left behind the times."

For full details about Carlite write to:
The Carlisle Plaster & Cement Co., Cocklakes, Carlisle
The Gotham Company Ltd., Wheeler Gate, Nottingham

CURRENT MARKET PRICES (LONDON)

(These prices apply to material purchased in the quantities named or otherwise as might be expected for a new building of medium size.) **April 1, 1953**

AGGREGATES AND SAND

1½ inch—all in—ballast	21/–	Yard cube
¾ inch do. do.	22/–	delivered
¾ inch screened shingle	20/9	(in five yard
⅜ inch do. do.	21/–	loads or
¼ inch granite chippings	60/–	more)
Sharp washed sand	21/–	
Pit sand	20/3	
Building sand	20/3	
Broken brick	17/6	
1½ inch shingle	20/–	
Cartage of muck	7/6	

BUILDING MATERIALS AS DESCRIBED, CENTRAL LONDON

CEMENTS packed in paper bags	Per ton
Portland in 6 ton lots	93/–
Do., from 1 ton to 5 ton 19 cwt do.	102/–
Do., Rapid hardening (6 ton lots)	101/–
Do. (but 1 ton to 5 ton 19 cwts)	110/–
Cement "Aquacrete" (do.)	134/6
Do., "417" or "Polar" (do.)	134/6
Do., "White" (1 ton lots)	153/6

LIME—			
Hydrated	including	123/– (1 ton loads)	deliv'd.
and	paper	120/6 (2/3 do.)	do.
Ground	bags	110/6 (4/5 do.)	do.
		109/– (6 do.)	do.

PLASTER—		
Keenes, coarse, pink (2 ton lots)	185/6 ton	
Do. do. white (do.)	191/–	do.
Sirapite, do. (2 ton to 3 ton 19 cwt lots)	135/3	do.
Do. finish (do.)	143/3	do.
Hardwall, do. (do.)	146/9	do.
Plaster, coarse, pink (do.)	134/–	do.
Do. do. white (do.)	142/6	do.
⅛in. Plaster baseboard (25 to 149 yds)	2/9	Yard Sup.
Do. (150 to 299 yds)	2/5	do.
3½in Jute scrim (100 yd roll)	8/7	each
Cow hair (under 3 cwt)	97/6	cwt

FIRECLAY—	
Stourbridge, loose (1 ton lots)	153/9 Ton delivered
Fire cement	12/3 14 lbs.

BRICKS

BACKING BRICKS (In truck loads)—		
Flettons	108/–	per 1,000 delivered
Do. Keyed	110/–	do.
Do. bullnose	128/–	do.
Blue wirecuts	450 6	do.
White	185/–	do.
Southwater engineering (No. 1)	318/–	do.
Firebricks—2½ inch	66/–	per 100 delivered
Do. —3 inch	77/6	do.
STOCK BRICKS—		
Mild stocks	168/–	per 1,000 at Works
Second, do.	199/–	do.
First do.	215/–	do.
Add for delivery—approx. 45/– per 1,000 in lorry loads.		
FACINGS (ex truck or lorry)—		
Rustics	133/–	per 1,000 delivered
White	190/–	do.
Blue pressed, 2½in	497 6	do.
Do. bullnose	512/–	do.
Reds (Multi sand faced)	279/–	do.
White glazed stretchers	1280/–	do.
Do. headers	1260/–	do.
Do. bullnose	1600/–	do.
Do. double stretchers	1700/–	do.
Do. double headers	1500/–	do.
Breeze fixing bricks	24/6	per 100
Fire tiles and lumps	31/6	foot cube
Wall ties—8″ × ¾″ × $\frac{3}{16}$″, black	68/9	per cwt.
Cement mortar (1 : 3) hand-made	80/–	yard cube

BRICKLAYERS' SUNDRIES—					
AIR BRICKS		9 × 3in	9 × 6in	9 × 9in	12 × 9in
Iron	each	1/10	3/–	4/8	6/1
Galvanized do.	do.	3/8	6/1	9/6	11/11
Terra Cotta	do.	1/3	2/6	6/–	10/2
Chimney pots, Terra		1ft	2ft	3ft	4ft
Cotta (11 to 25)	do.	6/8	11/8	26/6	45/8

PARTITIONS—			
18in × 9in Blocks keyed for plastering.			
Per yard super in 6 ton lots	2in	2½in	3in
In solid clinker including any half blocks	3/3	3/10	4/5
In cellular clinker blocks	3/9	4/4	4/11
In hollow clay blocks	4/2	4/5	4/11
Clinker blocks in small quantity	4/9	5/8	6/6

Intermediate quantities in all types may be had at intermediate prices.
Smooth in lieu of keyed faces extra cost per side 3d. per yd. super.

SINKS			
Fireclay white glazed in and out—standard quality.	24 × 18in	30 × 18in	30 × 20in
London pattern, no overflow, 6in deep	56/10	71/3	75/3
Belfast, plain edge, 10in deep	69/3	112/10	151/3

FLUE LININGS PLAIN, CIRCULAR	Foot lineal Straight	Each Bends
9in diameter	3/8	11/–
10in do.	4/7	13/9
12in do.	8/8	26/–
9in diameter, beaded end, 12in high	4/10	

FLUE PIPES AND FITTINGS	4in	5in	6in
Heavy asbestos type, 6ft. length	15/3	21/–	26/6
Do. 3ft length	7/8	10/6	13/3
Do. bends	5/9	7/3	8/8
Light asbestos type, 6ft length	12/6	15/9	21/–
Do. 3ft length	6/3	7/11	10/6
Bends	4/7	5/9	6/11
Baffler	12/5	14/9	15/8

DRAINAGE GOODS

GLAZED STONEWARE STANDARD LIST

ORDINARY TYPE—EACH	4in	6in	9in
Pipes in 2 feet lengths	1/8	2/6	4/6
Bends	2/6	3/9	10/1½
Junctions (4in on 4in, 6in on 6in, 9in on 9in)	4/2	6/3	13/6
Gullies with 4in outlets	6/3	6/10½	11/3
4in horizontal inlets	2/–	3/–	5/–
4in vertical ditto	3/–	4/–	7/–
Black iron grids	9*d*	1/5	2/9

Adjustment to Current Cost

	2 ton lots or more	Less than 2 ton lots: 100 pieces or more	Less than 2 ton lots: Under 100 pieces
"Best" pipes and fittings. Percentages to add	67½	87½	97½

Further percentages to be independently added in respect of: British Standard pipes, etc. 10. "Best" Tested pipes, 37½. British Standard Tested, 47½.

IRON DRAINAGE GOODS— Under 2 ton lots. Each	4in	6in
Cast iron pipes, 9 feet long	60/3	89/6
Do. 6 feet do.	44/1	69/5
Do. 4 feet do.	34/9	55/–
Do. 2 feet do.	21/4	33/4
Short bend	13/10	28/10
Junction	24/5	49/11

CURRENT MARKET PRICES (Continued)

DRAINAGE GOODS—Continued

GULLEY PARTS—	4in	6in	
Traps, high level, invert	23/6	57/–	each
Inlet, bellmouth pattern	16/–	24/6	do.
Do. with one vertical branch	23/6	38/–	do.
Do. with two do.	53/–	95/–	do.
Sealed cover, with felt washer	8/6	18/–	do.

RAINWATER SHOES	4in	6in	
With vertical inlet and rebated top	27/–	72/–	each
Extension piece, 6in high	17/–	17/6	do.
Flat loose coated grating	3/6	4/–	do.
Loose solid coated cover	5/9	6/–	do.

MANHOLE CHANNELS, WHITE GLAZED— Each	4in	6in	9in
Straight, 2 feet long	13/3	18/8	31/11
Taper, ditto	22/–	22/–	33/–
Bends, main, half section	25/4	36/4	59/5
Ditto, branch, ditto	15/5	22/–	—
Ditto, ditto, three quarters, ditto	22/–	34/1	—
Junctions, single	20/11	36/4	—
Ditto, double	28/7	49/6	—

BROWN GLAZED CHANNELS— Based on standard list (less than 100 pieces)	4in	6in	9in
Half-round main channel (2ft long)	2/6	3/8	6/8
Extra for stop ends	2/6	3/8	6/8
Extra for outlets	5/–	7/5	—
Channel bends with splayed ends	7/5	11/1	—
Three-quarter section do.	9/11	14/10	—

MANHOLE COVERS—	Black
24 × 18in Light foot traffic	30/– each
Do. Strong do.	48/6 do.
Do. Light car traffic	102/– do.
Do. Road traffic	155/– do.

SUNDRIES—	Galvanized	
Manhole steps	8/6	each
4in Mica valve fresh air inlets (L.C.C.)	23/–	do.
Plumber's hemp	6/–	per lb.
Gaskin, caulking	1/9½	do.
Canvas backed hair felt, 4in. wide	9d.	per ft run

ROOFING MATERIALS

WELSH SLATES (delivered)—

Sizes in inches	Quantity 1,000 to 1,999 per 1,000	100 to 499 per 100	1 to 99 per doz.
22 × 11	1762/–	214/–	28/–
20 × 10	1499/–	182/–	24/–
18 × 10	1142/–	137/6	18/3
16 × 8	784/–	95/–	12/6
14 × 9	675/–	82/–	11/–
14 × 4½	313/–	37/3	5/–

TILES (Broseley and Staffordshire)—	5,000 lots per 1,000	per 100
10½″ × 6½″ Machine made	285/6	34/9
Do., hand made, sand faced	335/–	40/6
Hips, valleys and angles	29/9 per dozen	
	Per 1,000	Per 100
Plain concrete tiles	175/–	19/3

Sheeting asbestos corrugated, 6in pitch (23 to 85 super yard lots)	6/1½	yard super
4½in. × 16 gauge, drive screws (galvanized)	16/9	gross
7½ × ⅜ hook bolts and nuts (do.)	66/–	do.
Washers, round, flat, galvanized	4/9	do.
Do. do. bituminous	2/–	do.

ROOFING FELT—		
Sanded bitumen felt (55lb)	1/–	Yard Super
Ditto, but 75lb in weight	1/6	Do.
Inodorous felt, best quality	3/–	Do.
Ditto, second quality	2/4	Do.
Underlining	1/8	Do.
Sheathing	1/8	Do.
Galvanized felting nails	1/9 lb	

PRECAST CONCRETE LINTOLS—
1 : 2 : 4—¾in material, finished with fair exposed faces, including all form-work and one ½in diameter mild steel rod reinforcement to each 4½in in width.

Per foot lineal delivered to site.

4½in × 6in	9in × 6in	9in × 9in	13½in × 9in	18in × 9in
4/–	6/–	7/8	9/6	11/6

STONE

PER FOOT CUBE in random blocks not exceeding 20ft average in each.

BATH STONE F.O.R. SOUTH LAMBETH—
Monks Park 6/8 St. Aldhelm 7/8 Doulting 7/4

STONE F.O.R. NINE ELMS—
Portland brown Whitbred 7/5. Beer 6/11.
Over 20ft average cube blocks extra cost.

TIMBER

Softwood—sawn—random lengths.

	Per Standard.	Per cubic foot.
Carcassing quality	£100	12/1½
Joinery quality	£120 and up	13/4

Plain edged unsorted flooring, per square	¾in	1in	1¼in	1½in
	90/–	110/–	138/–	165/–

½in insulating wall board (600 yards) 4/1 yard super.
Larger quantities cost less, and smaller quantities more.

SUNDRIES—	Dia.	3in	6in	9in
Black hexagon bolts, nuts and washers. Each	½in	5d.	6½d.	7½d.
	⅝in	7½d.	8½d.	10½d.
	¾in	10d.	11½d.	1/2d.
Sashline, hemp, good quality Per Yard Run	No. 6 9d.	No. 8 1/–	No. 10 1/3	
Floor brads	67/– per cwt			
Cut Clasp Nails	70/– per cwt			
Steel ordinary screws	1″ No. 8 2/4	2″ No. 8 3/9	per gross	
Brass, ditto	Do. 7/1	Do. 13/4		

HARDWOOD—

Prime	Per ft super ¾in	1in	Per ft cube
African mahogany	2/4	2/6	28/–
Honduras ditto	4/–	4/7	55/–
Portuguese Guinea ditto	3/1	3/3	36/–
African walnut	2/5	2/7	29/–
Australian ditto	5/6	5/10	65/–
English oak	4/3	4/6	50/–
Yugoslavian ditto	3/4	3/7	40/–
Burma and Siam Teak	4/8	5/–	56/–

DOORS.—STANDARD TYPE SOFTWOOD

Each in quantities 12 or more.
1⅜in finish, 4 horizontal panels moulded both sides. 6ft 6in high.
2′ 3″ wide 41/3
2′ 6″ do. 42/6
2′ 9″ do. 43/9

FLUSH DOORS 1⅜in thick, ply faced both sides, lipped edge.
All 6ft 6in high.
2′ 3″ wide 51/6
2′ 6″ do. 52/6

PANELLED DOORS: see B.S. 459—Part 1.

FLUSH DOORS:— see B.S. 459—Part 2.

2in (nominal) as last but upper panel prepared for glazing
2′ 6″ wide 59/–
2′ 9″ do. 62/–

2in (ditto) all as above but in 3 panels.
2′ 6″ wide 55/9
2′ 9″ do. 58/3

2in (ditto) all as above but in 2 panels.
2′ 6″ wide 51/3
2′ 9″ do. 53/6

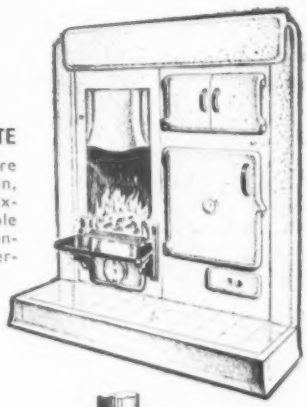
IRONMONGERY

	2in	3in	4in	5in	6in
Cast iron Butts, per pair	11½d	1/6	2/4½	4/4½	6/3
Hinges, spring, single action regulating, japanned, each	—	6/9	9/–	12/–	15/–
Do. but double action spring only, each	—	12/–	15/6	22/9	27/9
Do. blank only, each	—	5/6	10/6	12/9	16/6

THE ECONOMICAL FOUR

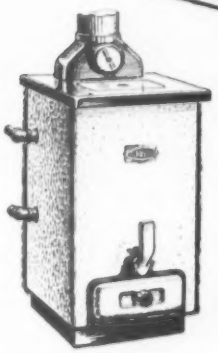
DERWENT COMBINATION GRATE

Efficient and economical fire provides heat for a large oven, fast-boiling hotplate with extension hob; hot closet. Ample domestic hot water and controlled room warmth. Overnight burning.



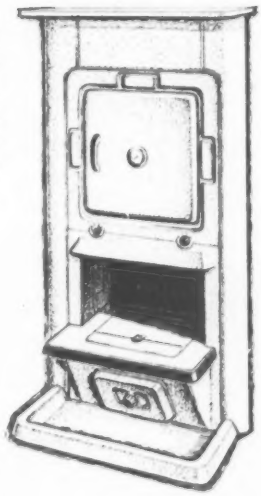
BOILERS B33 and **B22**

Waterway encircles fire and gives high output per square foot of heating surface. Bright, clean finish, minimum cleaning. B33 has steel water jacket, B.22 cast-iron.



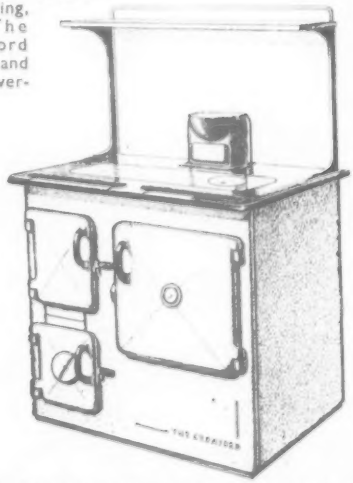
MILFORD oven-over Fire **COMBINATION GRATE**

At last, the perfect oven-over-fire grate. For space heating, water heating, cooking. Has withstood every test. Boiling space for five saucepans. Flue cleaning without removing ovens.



CROMFORD COOKER

The perfect all-purpose stove — Cooking, Water heating, Space heating. The economical Cromford burns any solid fuel and can be regulated for overnight slow burning.

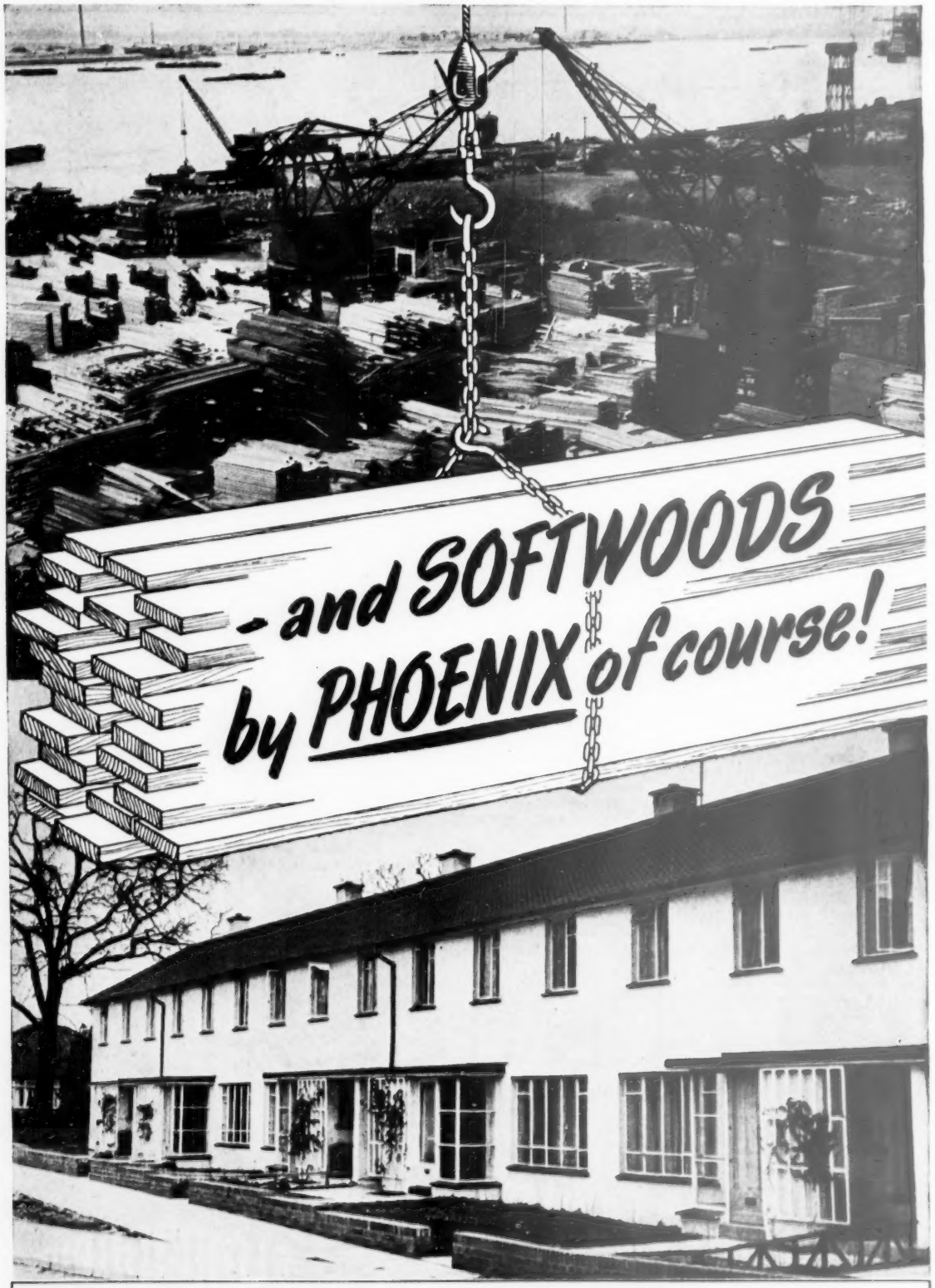


EACH MODEL APPROV[illegible] MINISTRY OF FUEL AN[illegible]

GLOW·WORM

GLOW-WORM BOILERS LTD · DERWENT FOUNDRY · [illegible]

London Showrooms: 22-24 Buck[illegible]



THE PHOENIX TIMBER CO. LTD.

FROG ISLAND · NEW ROAD · RAINHAM · ESSEX · Telephone: RAINHAM · Essex 3311

CURRENT MARKET PRICES *(Continued)*

IRONMONGERY—*Continued*

	12in	18in	24in	30in	36in
Tee hinges (japanned), per pair	2/–	3/10	—	—	—
Do. but stronger, per pair	2/8	5/2	8/–	—	—
Hook and Ride hinges, per pair	—	—	13/4	16/3	24/10
BOLTS—each—	3in	4in	6in	8in	10in	12in
Cabinet, barrel, straight or necked	1/7	1/9	2/4	—	—	—
Square spring, with brass knob	1/6	1/9	2/4	—	—	—
Tower bolts	—	1/8	2/6	3/3	4/1	4/10
Barrel bolts	—	2/10	4/1	5/4	6/10	8/3
Add to Tower or Barrel bolts if necked	—	4½*d*	5½*d*	6½*d*	6½*d*	6½*d*

LOCKS—each

Rim lock, 2 lever, wrot case brass bolt and bushing	11/9	Brass furniture or Bakelite do.	3/– 3/1
		Bakelite finger-plates	2/3
Mortice lock, 2 lever, bushed	15/8	Brass furniture or Bakelite do.	7/– 3/8
Cylinder latches, japanned case			17/–
Brass sash fastener		each	4/–
Casement fasteners (malleable)		do.	1/6
Do. stays (do.)		do.	2/–
Axle pulleys (brass face, iron wheel)		do.	3/4
Do. as last, but with brass wheel, 1¾in		do.	4/1
Sash line, No. 8 Anchor yellow label		per yard	1/–

METAL GOODS

Basis—Rolled steel joists, all sections from 5″ × 4½″ to 16″ × 6″ inclusive (except 9″ × 7″, 10″ × 8″, 12″ × 8″ and 14″ × 8″) (over one ton)	£38/–/–	per ton
Extras—9″ × 7″ section	5/–	do.
4″ × 4″, 5″ × 3″, 10″ × 8″, 12″ × 8″, 14″ × 8″ and 16″ × 8″ to 20″ × 7½″ sections inclusive	10/–	do.
22″ × 7″ section	15/–	do.
4″ × 2½″, 4″ × 3″, and 24″ × 7½″ sections	20/–	do.
Steel angles and tees	£40/–/–	do.
Steel bars	£38/–/–	do.
Mild steel rods ⅝″ diameter and upwards, cut to lengths within the usual margin and bent to normal schedules for reinforcement	49/–	per cwt
Extras per ton		
7/16in and ½in diameter in size	27/–	per ton
7/16in do. do.	27/–	do.
⅜in do. do.	34/6	do.
5/16in do. do.	42/–	do.
¼in do. do.	72/–	do.
3/16in do. do.	102/–	do.
Extras for length		
5ft to 3ft	7/6	do.
3ft to 2ft	15/–	do.
2ft	22/6	do.
40ft to 45ft	15/–	do.
45ft to 50ft	22/6	do.
Bolts and nuts	80/–	per cwt
Trench covering, including trays 1¼in deep and rebated frames, 9in wide	19/9	foot run
Do., but 12in wide	21/9	do.
Do., but 14in wide	23/–	do.
Do., but 18in wide	30/–	do.

METAL SUNDRIES

Cast iron pavement light filled with 4in × 3in glass lenses	38/–	per ft. super
¼ in wrought iron plate door in four panels with stiles and rails on both sides	40/–	do.
20 gauge galvanized iron trunking and straps	4/–	do.
24 gauge galvanized Tallboy 6ft high 9in diameter with 9in × 12in base	45/–	each.

CHAIN LINK FENCING—

In 25 yards lineal rolls inclusive of line wire.

2in mesh.	Height in inches— 36	42	48	60	72
10½ wire gauge	85/7	99/11	114/3	142/6	171/2
12½ do.	60/3	70/3	80/4	100/5	120/6
14½ do.	43/–	50/3	57/5	71/3	86/1

DOUBLE SOOT DOORS AND FRAMES—

	9in × 9in	12in × 9in	14in × 12in
Fitted with brass turnbuckle and cast key	17/3	22/–	35/–

SLIDING DOORS, GATES AND PARTITIONS—

Factory sliding doors in two leaves containing about 100 square feeet with mild steel angle frames covered with 24 gauge corrugated galvanized sheeting and including hanging tubular track and gear complete	13/6	foot super
Factory entrance gates with mild steel frames clad with 2in mesh chain link complete	10/6	do.
Steel partitioning, glazed (rough cast) and stove enamelled	16/–	do.

STEEL ROOF LIGHTS—

Lanterns with vertical sides, and hipped roof, glazed with ¼in cast glass and lead flashed.	16/–	foot super
Skylights of similar construction (180ft super)	15/–	do.

HIGH GRADE DOMESTIC BOILERS

Coke fed. Performance 20 to 40 gallons raised from 40°F per hour as under.

TYPE		£	s	d
20 gallons per hour 15in wide, 23in high.	Plain cast iron black finish	7	3	3
	Ditto, in cream mottle finish including side jackets	10	3	6
25 gallons per hour 19in wide, 22in high	In cast iron as before and base plate	10	13	6
	Ditto in cream mottle with side jackets and base	15	13	9
40 gallons per hour 22in wide, 23in high	In cast iron, etc. as last ditto	16	18	6
	Ditto in cream mottle all as last ditto	22	18	0

GAS, WATER AND STEAM TUBES

(From Standard List.)

Internal Diameter—	¼in & ⅜in	½in	¾in	1in	1¼in	1½in	2in
Tubes .. per ft	4*d*	4½*d*	5½*d*	6½*d*	9½*d*	1/1	1/4½	1/10
Bends .. each	8*d*	9*d*	11*d*	1/2	1/7½	2/7½	3/2	5/2
Elbows, sq. do.	10*d*	11*d*	1/1	1/3	1/6	2/2	2/7	4/3
Do., round do.	11*d*	1/–	1/2	1/5	1/8	2/4	2/10	4/8
Tees .. do.	1/–	1/1	1/3	1/7	1/10	2/6	3/1	5/1
Crosses .. do.	2/2	2/4	2/9	3/3	4/1	5/6	6/7	10/6
Backnuts do.	2*d*	2*d*	3*d*	3½*d*	5*d*	6*d*	8*d*	1/1
Sockets .. do.	3*d*	3*d*	4*d*	5*d*	6*d*	8*d*	10½*d*	1/3
Sockets, dimin. do.	4*d*	5*d*	6*d*	7*d*	9*d*	1/–	1/4	2/–

PERCENTAGES ON OR OFF ABOVE

In quantity and in random lengths.

TUBE—

Class A (light)	−20%	Black	+6%	Galvanized
Class B (medium)	−10%	Do.	+10%	Do.
Class C (heavy)	+2½%	Do.	+27½%	Do.

FITTINGS

Lightweight	+12½%	Black	+23½%	Galvanized
Heavy	+19%	Black	+32½%	Do.

RAINWATER GOODS (Painted or Unpainted)

In consignments of 3 cwt and over.
From Standard List.

Pipe:		2in	3in	4in	5in	6in
6ft lengths ..	each	10/8	12/6	16/5	21/5	27/5
3ft do. ..	do.	5/10	6/9	8/8	11/4½	14/4½
Shoe, ordinary ..	do.	2/3	3/4	4/10	8/2	11/3
Bend ..	do.	2/8	3/9	5/5	9/9	12/8
Branch, single ..	do.	3/11	5/9	8/–	12/8	19/8
Offset, 4½in ..	do.	3/3	4/7	6/9	11/3	14/9
Do. 9in ..	do.	4/3	5/8	8/5	13/3	16/9
H.R. gutter, 6ft length ..	do.	—	5/3	7/4	9/–	12/–
Angle or nozzle ..	do.	—	2/2	2/8	3/3	4/8
Stop end ..	do.	—	8*d*	11*d*	1/4	1/6

Rainwater goods *plus* 7½% at foot of invoice.

CURRENT MARKET PRICES (Continued)

PLASTERING MATERIALS

Sand, lime, cements and various plasters are previously included under those heads—

Metal lathing (¾" × 24G.) (20 yds.)		3/2	sq yard
Plaster baseboard, ⅜" (600 yards)		2/3	do.
Lath nails, galvanized		1/1	lb
White glazed tiles (6" × 6" × ¼")	small quantity	16/9	sq yard
Do. rounded on one edge	small quantity	20/–	do.
Do. on two adjoining edges	small quantity	24/6	do.

PLUMBER'S GOODS

4 lb lead sheet (in 1-ton lots)	125/6 per cwt
Lead water pipe in coils (do.)	126/9 do.
Plumber's solder	4/– lb.
Copper tacks	5/– do.

IRON SOIL AND WASTE PIPE. (Standard List)

each	2in	3in	3½in	4in
5/16in Medium pipe, 6ft lengths	12/7	14/11	16/9	19/1
Ditto, 4ft length	9/0¾	10/7¼	11/10	13/4¾
Bends	4/8	5/8	7/–	7/11
Ditto, with oval door	15/2	16/2	18/3	19/2
Junction, single	5/8	8/5	9/9	11/6
Ditto, with oval door	16/2	18/11	21/–	22/6
Swan necks, 4½in	5/8	8/11	10/3	11/11
Ditto, 9in	7/6	10/3	11/11	14/–
Holderbat, 2½in projection	4/8	4/10	5/1	5/2

All *plus* 7½% added at foot of invoice.

GALVANIZED CISTERNS, TANKS AND CYLINDERS—(Less than four)

each	gallons			
CISTERNS—	Nominal capacity			
Bends over tops and corner plates. Riveted or welded	100	150	200	300
14 gauge	144/–	197/–	239/–	342/–
12 ditto	167/–	212/–	263/–	467/–
⅛in plate	199/–	250/–	300/–	420/–
HOT WATER TANKS—	20	25	30	40
Riveted and with handhole and ring.				
12 gauge	100/–	111/–	121/–	144/–
⅛in plate	110/–	121/–	131/–	161/–
HOT WATER CYLINDERS—	20	25	33	39
Riveted, with handhole and ring.				
12 gauge	127/–	141/–	153/–	164/–
⅛in plate	142/–	157/–	173/–	184/–

PLUMBER'S BRASSWORK, etc.

	Each			
	½in	¾in	1in	1¼in
Boiler screws, single nut	1/7	2/1	3/1	5/–
Ditto, double nut	2/1	2/9	4/9	7/–
Cap and lining	1/1	1/8	1/10	2/1
Plumber's unions	2/6	3/4	4/6	7/–
Ball valves, screwed iron	16/6	29/–	—	—
Ditto, fly nut and union	17/6	31/6	—	—
Bib valves, crutch top screwed iron	10/–	14/9	—	—
Ditto, but screwed boss	11/–	16/–	—	—
Stop valves, screwed iron	9/–	13/–	—	—
Ditto, screwed iron and union	11/–	17/–	23/6	—
Ditto, double union	12/–	19/6	30/–	—
Waste, plug chain and stay	—	—	6/–	6/6
	1¼in	1½in	2in	4in
Caps and screws	2/9	3/–	5/–	—
Sleeves, long	—	—	7/8	11/–
Ditto, short	—	3/6	4/8	7/6
Thimble	—	4/4	5/6	11/9
Full way gate valves, hot pressed	23/–	32/–	—	—
		1¼in	1½in	2in
Lead 7 lb. P. trap		6/2	8/1	11/5
Ditto, S. trap		7/8	10/–	14/1
Lead 6 lb. P. traps with 3in seal		6/11	8/4	—
Ditto, but S traps ditto		8/7	10/6	—

Wire balloon guards, copper, 2in 3/–; 4in 3/10.
Ditto, galvanized iron, 2in 1/9; 4in 2/–.
Hair felt, 34in × 20in, 24 oz., 6/– sheet.
Boss white jointing compound, 2/– lb.
Gaskin, 1/5½ lb. Hemp, 6/– lb.

COPPER TUBES—Extract from B.S. 659/1944—

Internal work (semi hard).

Nominal bore	Outside diameter inch	Gauge	Weight lb per ft	3 Cwts lots Price per lb pence	Price per ft pence
¼in	0·596	19	0·27	47½	12·83
⅜in	0·846	19	0·39	46	17·94
1in	1·112	18	0·62	45	27·90
1¼in	1·362	18	0·76	44½	33·82
1½in	1·612	18	0·91	44½	40·49
2in	2·128	17	1·40	45½	63·70

CAPILLARY TYPE CONNECTIONS—

All ends copper to copper.

Each	½in	¾in	1in	1¼in	1½in	2in
Straight	1/10	2/7	4/1	5/4	7/2	10/3
Bends	4/9	5/11	8/1	11/7	18/2	25/6
Tees	4/5	5/2	8/3	12/1	17/3	25/6
Brackets (brass)	2/1	2/3	2/6	—	—	—

GLASS

	Per foot superficial 24 oz.	26 oz.	32 oz.
English, flat drawn sheet glass cut to sizes in squares	7¼d.	9½d.	1/–
Figured rolled and cathedral, white, cut to sizes, in squares (⅛in)	9d.	Per foot super	
Ditto, but in standard tints	1/4½	Do.	
⅛in Rolled, cut to size, in squares	9d.	Do.	
¼in or 5/16in. Rough cast ditto	1/–	Do.	
¼in Ditto wired ditto	1/1	Do.	
Georgian wired ditto	1/1½	Do.	
Fluted (No. 4) ditto	1/0¾	Do.	
Reeded (narrow, broad, cross and major) ditto	1/1	Do.	
Reedlyte (narrow and broad) ditto	1/1	Do.	
Spotlyte ditto	1/1	Do.	
¼in Calorexficast ditto	1/2½	Do.	

	Each 5¾" × 5¾"	7¾" × 7¾"
3¾in hollow glass light diffusing blocks	2/9	4/2
Ditto corner blocks	5/3	6/9

POLISHED PLATE GLASS. (Tariff). Cut to sizes.

Ordinary substance approximately ¼in thick.

Per superficial foot.	Qualities General Glazing	Selected Glazing	Silvering
In plates not exceeding:			
2ft super in each	3/7	4/3	5/1
5ft ditto	4/5	5/2	6/2
45ft ditto (unless extra sizes)	5/1	5/9	6/11
100ft ditto (ditto)	5/6	6/9	8/10

Extra sizes, i.e., Plates exceeding 100ft super or 96in high or 160in wide at higher prices.

DECORATING MATERIAL

	Price	Unit
Aluminium Paint	37/6	Gallon
Distemper, ceiling	33/9	Cwt.
Distemper, washable	120/–	do.
Enamel	65/–	Gallon
Gold Metallic Paint	86/6	do.
Heat Resisting Paint	50/–	do.
Japan, black	23/6	do.
Knotting	30/–	do.
Linseed Oil	20/6	do.
Boiled, ditto.	21/–	do.
Proprietary Paints (good class)—		
Finishing	59/6	do.
Priming	55/-	do.
Undercoat	57/-	do.
Paperhanger's Paste	34/6	Cwt.
Petrifying liquid	8/6	Gallon
Putty	60/6	Cwt.
Size	9/3	Firkin
Terebine	16/-	Gallon
Turpentine substitute	6/2	do.
Varnish, oak, copal, inside use	35/-	do.
Ditto, ditto, outside use	40/-	do.
Ditto, white, eggshell, flat	44/6	do.
White lead mixed paint	59/–	do.
White lead	167/6	Cwt.
Whiting	12/6	Cwt.

A Window in Jamaica

BY JOHN MINTON

Different climates present special problems to the Window maker. Crittall Windows are exported to more than sixty countries; and with them often go such things as sunbreakers, stormsash, shutters, flyscreens and typhoon bars.

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THE CRITTALL MANUFACTURING COMPANY LIMITED

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1953

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Big attraction at this year's *BIF* is a 40,000 sq. ft. "Town" of prefabricated buildings Britain offers for export—school, hospital, houses, etc.—fitted, furnished, and equipped. Wide range of other building trade exhibits at Birmingham.

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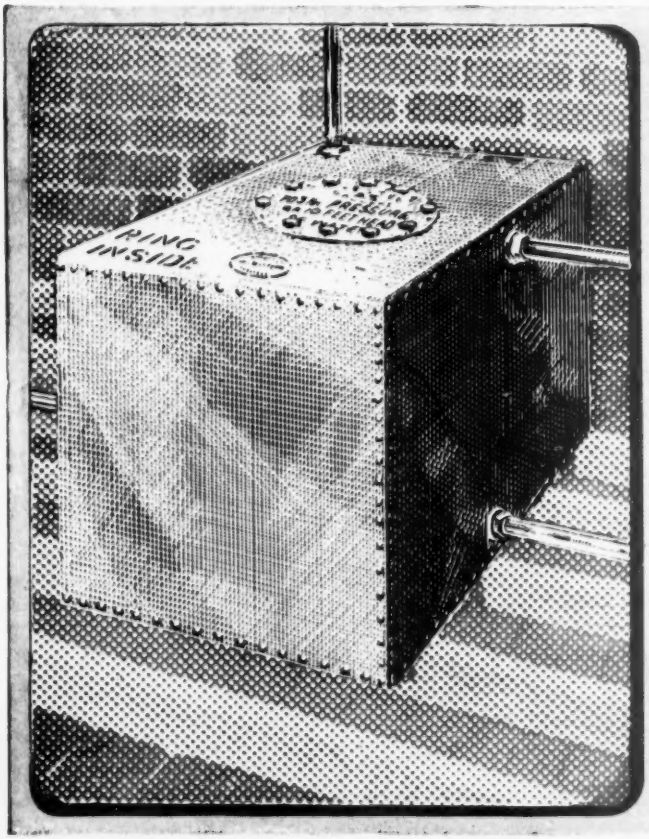

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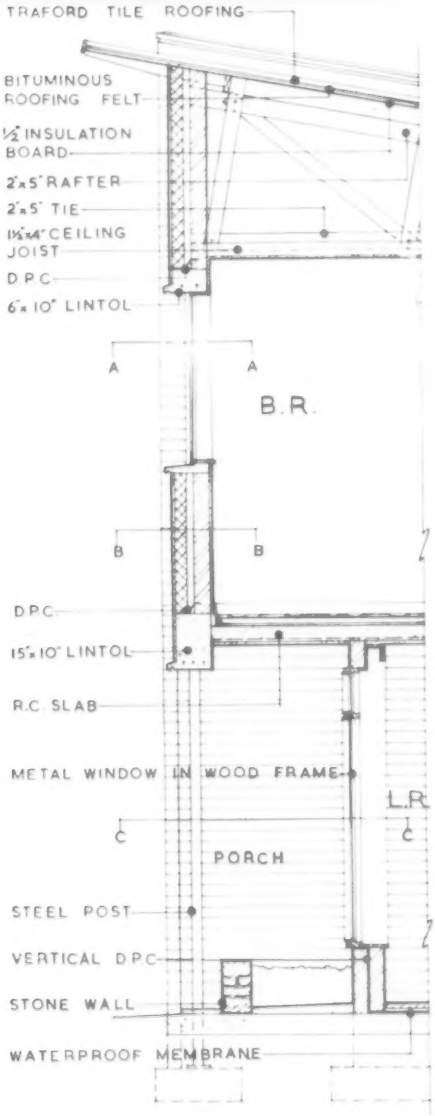
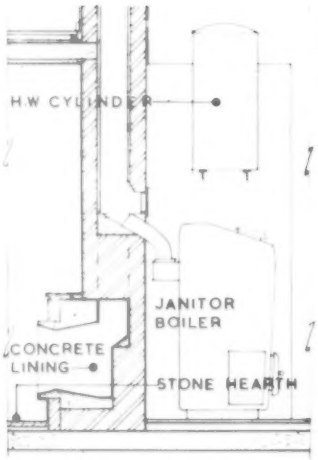


SECTION THRO' WALL



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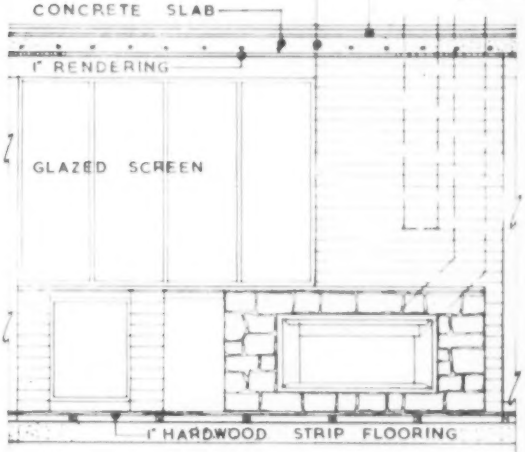
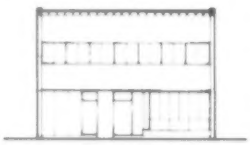
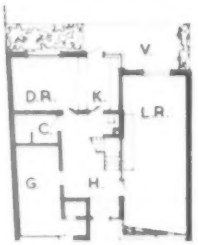


ELEVATION





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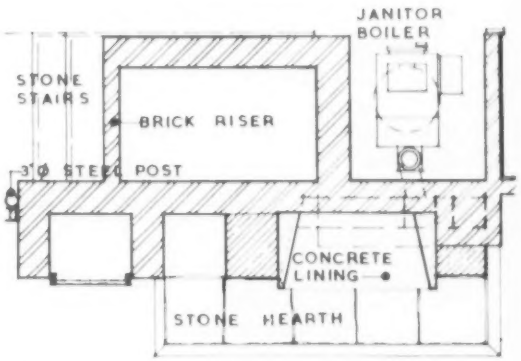
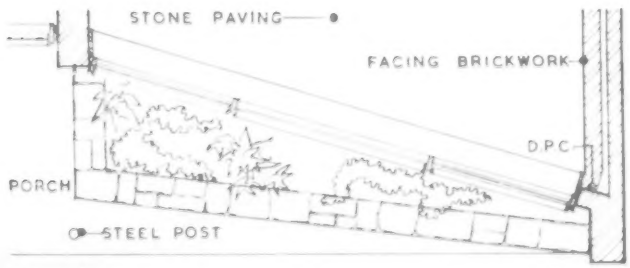


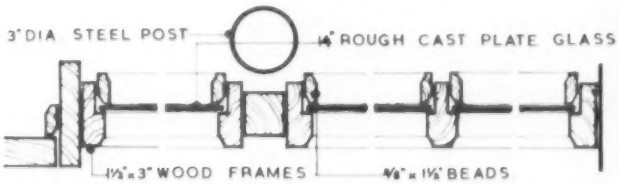
PLAN OF FIREPLACE

PLAN A-A

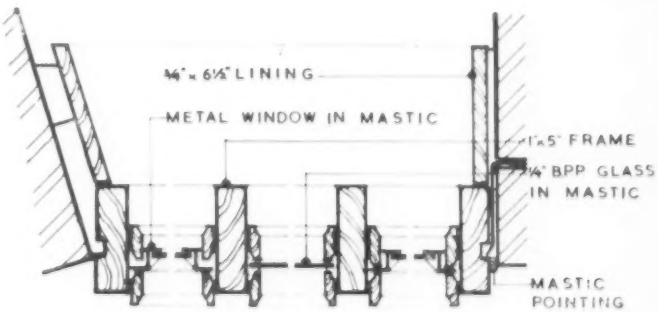
PLAN B-B



PLAN C-C



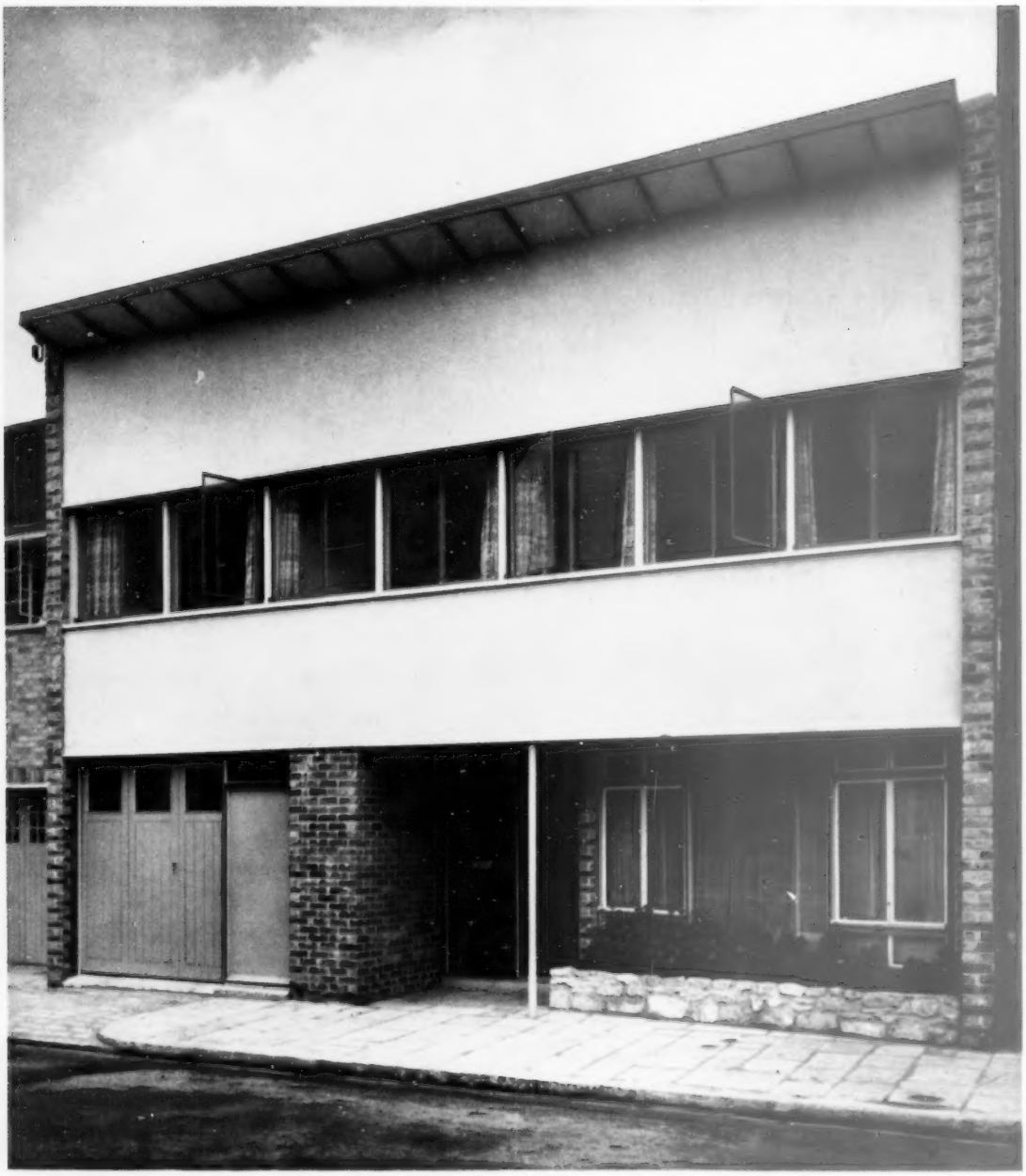
PLAN OF GLAZED SCREEN IN LIVING ROOM



PLAN OF LIVING ROOM WINDOW

SCALES. 1½" & ¼" TO 1' 0"

FRONT WALL & FIREPLACE OF HOUSE AT PORTSMOUTH — A.G. GOODAIR



HOUSE AT PORTSMOUTH: FRONT WALL

ARCHITECT: A. G. GOODAIR

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DESIGN SCHEME 5
(LIVING ROOM)

from the Accotile* DESIGN PORTFOLIO

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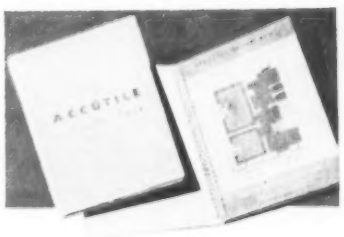

Architects are invited to request copies of Accotile publications giving full details and colour ranges of Plain, Monochrome and Marbled Tiles. A "Design Portfolio" illustrating typical floor designs for Housing projects is especially interesting. A sample range of tile specimens can also be obtained. We shall be pleased to add your name to our mailing list.

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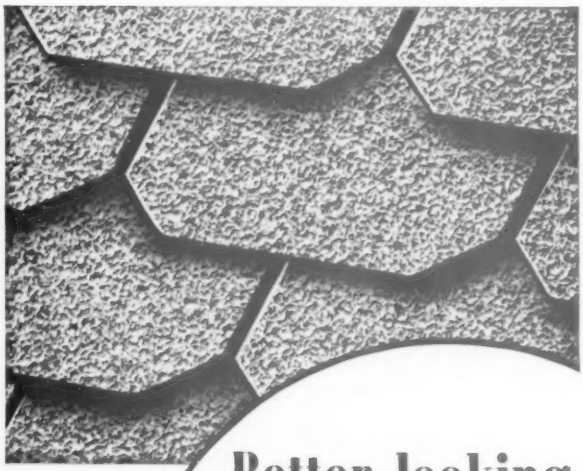

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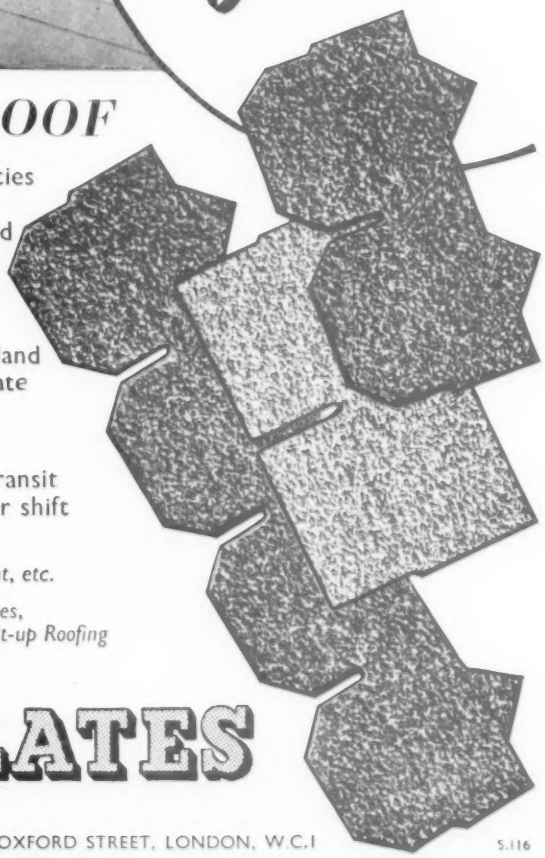

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S.116

Control of Elevations

ON several occasions recently I have heard complaints from architects, who I know to be good designers, that they have been having trouble with local authorities in regard to approval of elevations. This has usually, it seems, been on account of those who are responsible for approval or rejection of elevations being either architectural assistants who are insufficiently knowledgeable in matters of design, or town planners who have not even been trained to appreciate good design when they see it.

It is true that if bother of this nature arises one can appeal to the Ministry of Housing and Local Government but architects are unwilling to take such a step owing to the inevitable delay which is likely to arise. Therefore they appear to take the easy way out and compromise with the officials of the objecting authority, usually to the detriment of what they believe to be good design.

It seems that to assist staffs to administrate the law some authorities have laid down rules for guidance which immediately become, especially in unknowledgeable hands, hard and fast rules from which no departure can be made without very heavy pressure. Quite often such rules ignore the requirements of good designs which do not conform completely with the canons of tradition. For example, I heard of one authority which decided that all elevations of each building must have the same surface treatment with the result that when an architect submitted a design using weatherboarding for the upper floors on the front and back elevations, but brick work for the full height on the two ends, he had his design rejected in spite of extremely well designed stops for the weatherboarding at each end. There were three reasons for not having weatherboarding on all faces, first, because the architect thought his design was better treated in this manner, secondly the end walls were largely occupied by chimney stacks and, lastly, the fact that the timber licence would not permit a greater area. When it was explained that the timber licence would not provide for covering the ends, as the local authority desired, this authority then suggested using red tile-hanging for the end walls of the upper part of the building as then' all the walls would be covered with an applied treatment and would thus have a similar appearance, which may be, on the paper of an uncoloured drawing, somewhat similar; one can but presume that the authority had no imagination. It was rather interesting in this case to examine other houses which had received approval by the same authority without difficulty as several of these within relatively short distances obviously lacked the hand of a skilled designer; there were, in fact, certain examples of poor elevational treatment particularly due to the poor selection of materials, but apparently these conform to the rules.

It seems to me that if we are to control elevations, and I believe it is generally accepted as being desirable that we should, some much more effective steps ought to be taken to see that any such control is administered only by those with real understanding and knowledge of good design. How then can this administration be achieved effectively? I heard of one authority who contemplated using, and it may be that in fact it does, a panel of architects nominated by the local Allied Architectural Society. This raised doubts in the minds of some members of the Society as they were rather fearful of this procedure because they thought that if certain members of the Society happened to be selected to serve on the panel at the same time, as might well happen, the only designs which might be expected to be approved without difficulty would be those with neo-Georgian elevations since these members thought all other forms of elevational treatment to be undesirable.

It certainly seems that panels of architects independent of the authority would be the most satisfactory way of administrating the control of elevations but such panels must be drawn only from those architects whose design opinions are viewed by the really knowledgeable as being sound, progressive and unbiased. The choice of suitable persons for such panels might provide many professional heartaches as we are, as a profession, notoriously unkind critics of the work of our fellow architects.

I wonder whether the constant critisms of the work of other architects, which is often not confined to occasions when only other architects are present, is not extremely harmful to the profession's obvious desire to see all buildings designed by architects. I believe we should take steps to establish a greater faith in ourselves and our fellow architects and to cut out the greater part of this constant carping criticism. On this subject I recall an American architect writing many years ago; he reminded his fellow architects that as Saint John the Evangelist grew old and feeble he gradually shortened his sermons but he seldom departed from his main theme which was "Little children love one another"; this architect suggested that the world would be a better place if the architects would adopt this text in their attitude to one another, more especially as the criticisms of other architects were seldom related to anything that was vital in relation to the dealings with the profession as a whole with the potential clients.

If we might have panels to judge elevations control who would be receptive and understanding of the efforts of their architectural brethren we might be able to improve the administration considerably. There may be, however, an administrative difficulty in paying for the employment of independent assessors. I also wonder sometimes whether it is right and proper for any town planning authority, especially when the final adminstrative decision is in the hands of other than trained architects, to question the design judgment of an architect since he is registered under the Act. When a person is accepted as a registered architect it would seem that the law of the land has been satisfied that he is competent; should it not therefore be assumed that any design he submits to authority for approval should be acceptable? If this is not so, what good does the registration act achieve? While I am fully aware that some registered architects may not be as good designers as others, I feel it is very doubtful that their abilities as designers should be questioned since they have passed the qualifying requirements. It might, therefore, simplify considerably the administration of control of elevations, except when elevations form part of a co-ordinated scheme, if only those designs submitted by persons other than registered architects had to be examined.

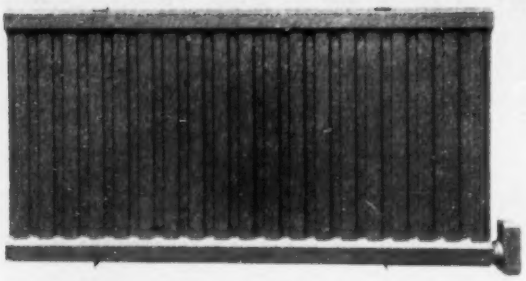
In general, architects have supported the idea of control of elevations but I wonder whether when so doing they contemplated the possibility that it might also control their freedom to design what they believed to be correct in the particular circumstances of any building or site because of problems of efficient administration, which cannot always be in the hands of the truly competent. Bad administration does not make the law bad but it certainly can make life difficult. It may be that sometimes we would be better without certain good laws if there is doubt that they can be fairly and sensibly administrated by those on whose shoulders rest the making of final decisions.

DUTCH UNCLE

Builders' Benevolent Institution: Vacancies in Residential Home.

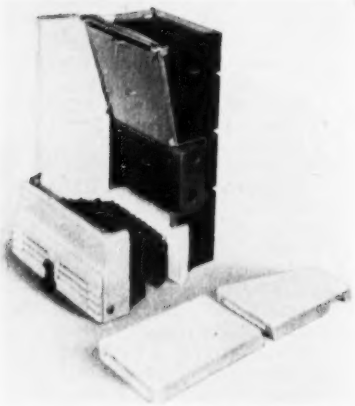
The Builders' Benevolent Institution maintains a residential home at Twickenham for master builders who have been established in their business for at least ten consecutive years, or their widows, sons and daughters of limited means. At present there are a number of vacancies for either married couples or single persons. Residents in the home must be able-bodied and are asked to pay a nominal amount weekly according to their circumstances. Further information and application forms may be obtained from the Secretary, Mr. R. G. Kilpin, Builders' Benevolent Institution, 47, Bedford Square, W.C.1.

MOSAICS



SERVICES
HEATING
B 3/37.

A wall type oil filled radiator by Steel Radiators Limited. The specification is as for the models shown in Mosaics B 3/35. and B 3/36.



FITTINGS
SOLID FUEL
APPLIANCES
C 4/5.

This is the Eagle Boiler Flue Set Mk. II a product of Radiation Ltd., Stratford Place, London, W.1.

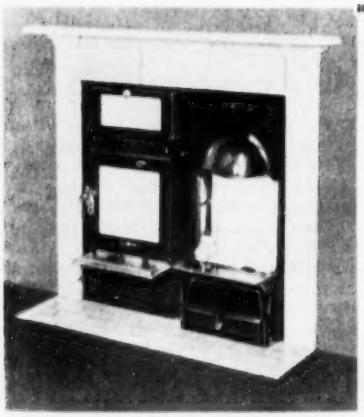
The set is supplied as a complete unit with or without a boiler and with one of the firms range of 16in inset fires.

The set comprises a self-contained cast-iron boiler flue casing, fitted with sliding damper control, a flue cleaning door, refractory side bricks and base brick.

The set requires a minimum brickwork opening 18¼in wide by 14in deep by 27in high.

The set is also available with the Fulham, Sutton and Chevin 18in. fires.

See B.I.F. Castle Bromwich 1953.



SERVICES
HEATING
B 3/38.

Many old combination grates are still giving reliable service but, with increased costs of fuel, are uneconomical for those with restricted purses.

Radiation Ltd., Stratford Place, London, have now produced the conversion fire for overnight burning which will convert Yeoman Ranges made after December 1935, and Yorkist Ranges made after 1930 and all Dyneley and Yorkist Major single oven ranges.

Illustrated is a Yorkist Range after conversion to overnight burning.

These conversion sets are at the B.I.F. Castle Bromwich, Stand No. 501/400 Engineering & Hardware Section.

SERVICES
ELECTRIC
WIRING, ETC.
B 5/20.

The Lundberg 13 amp switch socket is designed for surface and flush mounting. The makers are Simplex Electric Co. Ltd., Oldbury, Birmingham.

Shown here is the surface mounting pattern. The dolly is in a position where it cannot easily be damaged.

Dimensions of the surface model are 2in x 2in x 1⅞in. Dimensions of the flush pattern are 3¼in x 3¼in. Finish of both types is brown synthetic resin. Plug pins are rectangular in section and the sockets are shuttered.

INDUSTRIAL NOTES

● The Cape Asbestos Company Limited of London, who have world-wide interests in asbestos products, announce that they have completed arrangements for the production of inorganic fibres from a natural rock, of which there are considerable deposits in Scotland.

William Kenyon & Sons, Limited, of Dukinfield, Cheshire, the well-known firm of Heat Insulation Engineers, Rope and Textile Manufacturers, who have carried out extensive investigations into the manufacture and utilization of this new product, will act as sole distributors of the material, which will be marketed under the registered trade name of "Rocksil."

The fibres manufactured from this indigenous material have a silken appearance, possess a very high tensile strength, and the long staples when made up into the form of mats offer a high resistance to the transmission of heat, cold and sound. The fibres can be produced to almost any degree of fineness and, in mass, assume an almost pure white appearance. They will withstand temperatures up to 1400°F. and will accordingly cover a very wide range of requirements in the Heat Insulation Industry.

The material will be used on ships, road and rail vehicles, aircraft, a wide range of industrial plant, in factories and indeed in all types of buildings, domestic and otherwise.

* * *

● A new edition of the "Industrial Relations Handbook," compiled by the Ministry of Labour and National Service, has been published. H.M.S.O., 4s 6d, post free, 4s 10d.

All the information contained in the 1944 edition has now been brought up to date, certain material hitherto available only in the Supplements has been incorporated in the main work, and an account is given of developments since 1944, such as the Industrial Disputes Order, 1951, the Wages Councils Acts, 1945-1948, and the Fair Wages Resolution of October, 1946.

* * *

● The Board of Trade have been informed that a Burmese Government Purchasing Mission will be visiting the United Kingdom between May 5 and May 25, 1953. The Mission will be under the leadership of the Minister of Public Works and will include representatives of the Shipping Board, the Railways and of the Irrigation, Agriculture, Inland Water Transport and Building and Works Departments.

The Mission's object will be to buy capital goods and machinery required for various Pyidawtha schemes and details of its requirements may be obtained from the Commercial Attaché at the Embassy of the Union of Burma. All enquiries, which should bear the reference number CA/184, should be addressed to the Embassy at 76, Cadogan Square, London, S.W.1. (Tel.: Kensington 1195.)

* * *

● Mr. John L. Collins, who has been Secretary and Legal Adviser of Turner & Newall, Ltd., since 1934, is retiring from the position of secretary, but retains the position of Legal Adviser. Mr. A. D. N. Jones, Barrister-at-Law (at present an assistant secretary) has been appointed to be Secretary as from April 1, 1953.

CONTRACT • NEWS •

Notes below give basic data of contracts open under locality and authority which are in bold type. References indicate: (a) type of work, (b) address for application. Where no town is stated in the address it is the same as the locality given in the heading, (c) deposit, (d) last date for application, (e) last date and time for submission of tenders. Full details of contracts marked ★ are given in the advertisement section.

OPEN

BUILDING

AIREBOROUGH U.C. (a) 6 flats at Yeadon. (b) Engineer and Surveyor, Micklefield House, Rawdon, Nr. Leeds. (c) 2gns. (e) May 13.

* * *

ALDRIDGE U.C. (a) 3 blocks of garages at Bickley Road, Rushall; St. Margaret's Road, Pelsall; and Scott Road, Great Barr. (b) Engineer and Surveyor, Council Offices, Daw End, Rushall, Walsall. (c) 2gns. (e) May 6.

* * *

BARROW-IN-FURNESS B.C. (a) 3 pairs of police houses at Abbots Vale, Newbarns (South) Estate. (b) Borough Engineer, Town Hall. (c) 2gns. (e) May 5.

* * *

BENFLEET U.C. (a) Public conveniences at Hadleigh. (b) Engineer and Surveyor, Council Offices, Thundersley, Essex. (c) £1. (e) May 13.

* * *

BENTLEY-WITH-ARKSEY U.C. (a) Contract 47, 22 houses, etc. (b) Council's Engineer, Council Offices, Cooke Street, Bentley, nr. Doncaster. (c) 2gns. (e) May 4.

* * *

BERKSHIRE AND READING FIRE AUTHORITY. (a) 1 pair of houses at (1) Castle Grove, Donnington Priory, Newbury; and (2) St. Mark's Road, Windsor. (b) County Architect, Wilton House, Parkside Road, Reading. (c) 2gns. each site, payable to Berkshire and Reading Fire Authority. (e) May 7.

* * *

BRIGHOUSE B.C. (a) Contract 45. 5 blocks of 4 flats at Rastrick (Field Lane) Estate. (b) Borough Engineer, Town Hall. (e) May 16.

* * *

BUSHEY U.C. (a) 12 flats and 42 houses at Ashfield Avenue. (b) Engineer and Surveyor, Council Offices, Rudolph Road. (c) 3gns. (e) May 11.

* * *

CATERHAM AND WARLINGHAM U.C. (a) Library with 2 flats at the Mill House Estate, Warlingham. (b) Council's Surveyor, Council Offices, Caterham. (c) 2gns. (e) May 14.

* * *

COLCHESTER B.C. (a) 63 garages at the Shrub End site and 17 at Barn Hall. (b) Borough Engineer, 1, West Stockwell Street. (c) 2gns. (e) May 6.

* * *

CROYDON B.C. (a) 50 garages at New Addington Estate. (b) Borough Engineer, Town Hall, Katherine Street. (c) 1gn.

* * *

CUCKFIELD R.C. (a) Contract No. 91. 34 dwellings at Hassocks. (b) Engineer and Surveyor, Council Offices, Boltro Road, Haywards Heath. (c) 2gns. (e) May 18.

* * *

DEVON C.C. (a) Primary school. (b) County Architect, 97, Heavitree Road, Exeter. (c) 3gns. crossed cheque payable to Council. (d) May 1.

* * *

EAST SUSSEX C.C. (a) Knoll infants' school, Hove. (b) County Architect, County Hall, Lewes. (d) May 4. (e) June 8.

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EBBW VALE U.C. (a) 2 pairs of shops and flats and 1 pair of houses, Waenorest site, Beaufort, Ebbw Vale. (b) Council's Architect, Council Offices. (c) 3gns. crossed cheque in favour of Council. (e) May 5.

* * *

ESSEX C.C. (a) Hutted classrooms at (1) London Road Primary School, Clacton (approx. cost £3,000); and (2) Canterbury Road Primary School, Colchester (approx. cost £4,500). (b) County Architect, County Hall, Chelmsford. (d) April 25.

* * *

FARNWORTH B.C. (a) Public conveniences at Barton Road and Campbell Street. (b) Borough Engineer, Town Hall. (c) 1gn. (e) May 1.

* * *

GUILDFORD B.C. (a) Additions to the Central Library, High Street. (b) Borough Engineer. (c) 2gns.

* * *

HAYES AND HARLINGTON U.C. (a) 60 flats, Barnhill Estate, Hayes. (b) Engineer and Surveyor, Town Hall, Hayes, Middx. (d) April 27, with details of similar contracts completed or in hand.

* * *

LONDON — WANSTEAD AND WOODFORD B.C. (a) 56 flats and community hall at Broomhill Road, Woodford Green. (b) Town Clerk, Municipal Offices, High Road, South Woodford, E.18. (d) April 27, with names of two architects or authorities for whom comparable schemes have recently been carried out, as referees.

* * *

N. IRELAND—ARMAGH. (a) Extensions to Grammar School at Greenpark, Armagh, for the Reverend Brother Superior. (b) W. H. M'Evoy, Ulster Bank Chambers, 73, May Street, Belfast. (c) 5gns. (e) May 1.

* * *

NORFOLK E.C. (a) (1) Downham Market secondary schools and (2) Marham primary school. (b) Chief Education Officer, County Education Offices, Stracey Road, Norwich. (d) April 29, stating sites. (e) July 3.

* * *

NORTHWICH U.C. (a) 6 pairs of houses at Manor Park Estate. (b) Engineer and Surveyor, The Council House, Church Road. (c) 2gns, payable to Council. (e) May 6.

* * *

NOTTINGHAM C.C. (a) Adaptation of Clifton Hall, Clifton, Nottingham, for use as a school. (b) Engineer and Surveyor, The Guildhall. (c) £2. (e) May 4.

* * *

ORRELL U.C. (a) 54 houses on the Kitt Green Estate. (b) Engineer and Surveyor, Council Offices, Orrell Post, Nr. Wigan. (c) 2gns, cheque payable to Council. (e) May 11.

* * *

RUMNEY (GLAM). (a) Erection of building at rear of Rumney Court, for Rumney and St. Mellons (British Legion) Club, Ltd. (b) R. R. D. Wigley, 8, Park Grove, Cardiff.

* * *

SCOTLAND—BURGH OF CULROSS. (a) 9 houses at the Gap site (separate trades). (b) Messrs. Gibson and Simpson, 3, Melville Crescent, Edinburgh, 3. (e) May 5.

* * *

SETTLE R.C. (a) (1) 4 pairs of houses, (2) 3 pairs, (3) 2 blocks of 4 houses and (4) 4 bungalows at Hellifield. (b) Engineer and Surveyor, Town Hall (c) 2 Gns. (e) May 8.

* * *

SOUTHPORT B.C. (a) 2 old people's bungalows at St. Cuthbert's Close, Churchtown, Southport. (b) Borough Architect and Town Planning Officer's Department, 93-105, Lord Street. (c) 1 Gn. (e) May 15.

* * *

THIRSK R.C. (a) Mortuary building at Castlegarth, Thirsk. (b) Messrs. Needham, Thorp and White, 6, High Petergate, York. (c) 2 Gns. (e) May 9.

* * *

THURROCK U.C. (a) New stores and demolition and re-erection of buildings at the Housing Estate Depot, Hathaway Road, Palmer's Avenue, Grays. (b) Engineer and Surveyor, Council Offices, Grays. (c) 2 Gns. (e) May 5.

* * *

WAKEFIELD C.C. (a) (1) 94 houses and (2) 24 houses on the Eastmoor Estate. (b) City Engineer, (Room 33), Town Hall. (e) May 4.

* * *

WAKEFIELD C.C. (a) (1) 1 block of shops and flats at Hoyland Road, Kettlethorpe, and 1 block at Barden Road and 1 block at Windhill Road, Eastmoor. (b) City Engineer, (Room 33) Town Hall. (e) May 4.

* * *

WARE U.C. (a) Contract No. 18. 6 houses at Garland and Jeffries Roads. (b) Engineer and Surveyor, The Priory. (c) 2gns. (e) May 2.

* * *

WEST RIDING C.C. (a) Minor repair work to schools at Baildon, Shipley, Bingley and Denholme. (b) Divisional Education Officer, Divisional Education Office, Town Hall, Shipley. (d) April 30, stating localities.

* * *

WEST SUSSEX C.C. (a) Job No. 3529, Fire station at Upper Shoreham Road, Shoreham-by-Sea. (b) County Architect, County Hall, Chichester. (d) April 30.

* * *

WEYMOUTH AND MELCOMBE REGIS B.C. (a) 24 flats and 14 aged persons' bungalows, Downclose Estate, Weymouth. (b) Borough Engineer, 6, Pulteney Buildings, Weymouth. (c) 2gns. (e) May 21.

* * *

YORK C.C. (a) (1) 5 blocks of 8 aged persons' dwellings at Askham Lane, York, and (2) 2 pairs of houses at Turnmire Road, York. (b) City Architect, 8, St. Leonard's Place. (c) (1) £3 and (2) £2. (e) May 9.

MISCELLANEOUS

LONDON—CAMBERWELL B.C. The Council is preparing panels of Contractors for (a) prefabricated buildings for social and community centres costing up to £10,000 and (b) reinstatement and alterations to the buildings and equipment of public slipper baths, costing between £10,000 and £25,000. Applications, stating panel or panels, to Town Clerk, Town Hall, S.E.5, by May 9th, with statement of recent contracts executed for similar work and names of referees.

PLACED

Notes on contracts placed state locality and authority in bold type with (1) type of work, (2) site, (3) name of contractor and address, (4) amount of tender or estimate. † denotes that work may not start pending final acceptance, or obtaining of licence, or modification of tenders, etc.

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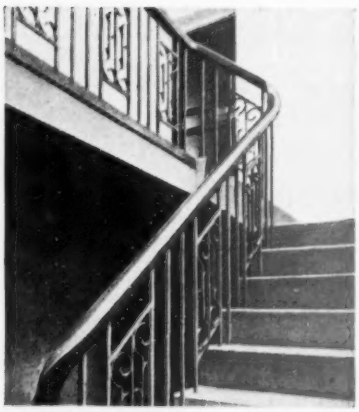
MERTON AND MORDEN, SUTTON AND CHEAM, AND BANSTEAD COUNCILS. (1) 532 houses. (2) Banstead. (3) Carlton Contractors, Ltd., 15, Lingfield Crescent, London, S.E.9. (4) £740,000.



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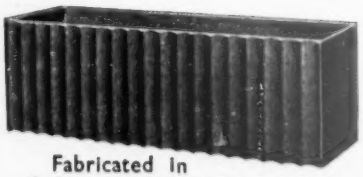

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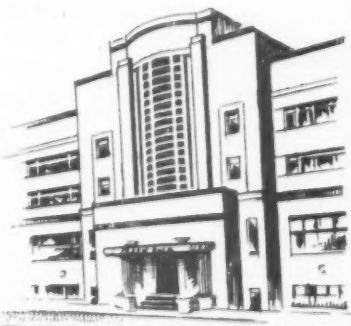

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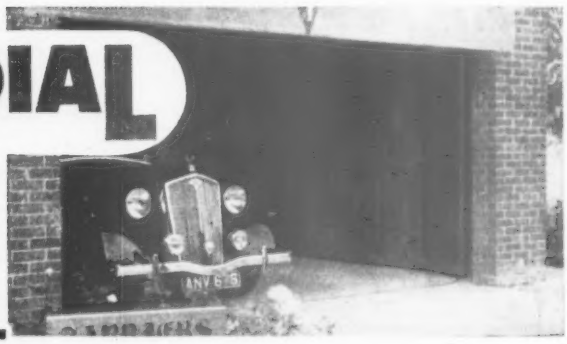

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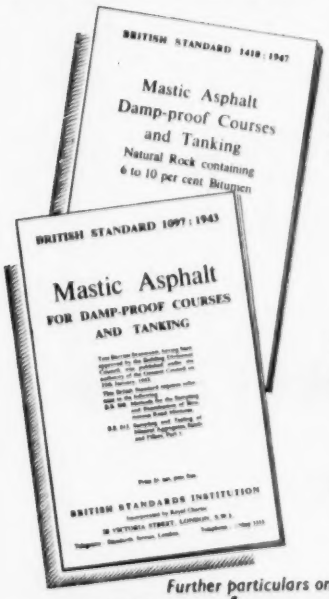
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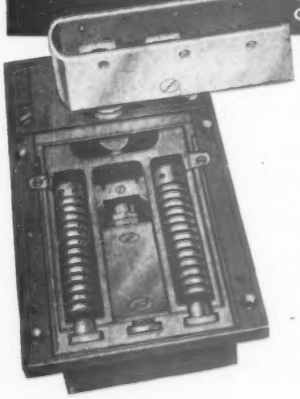

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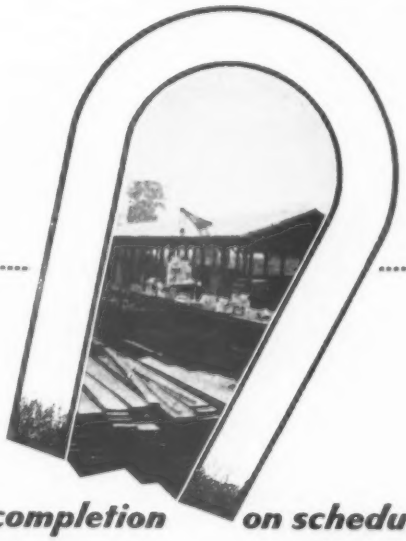

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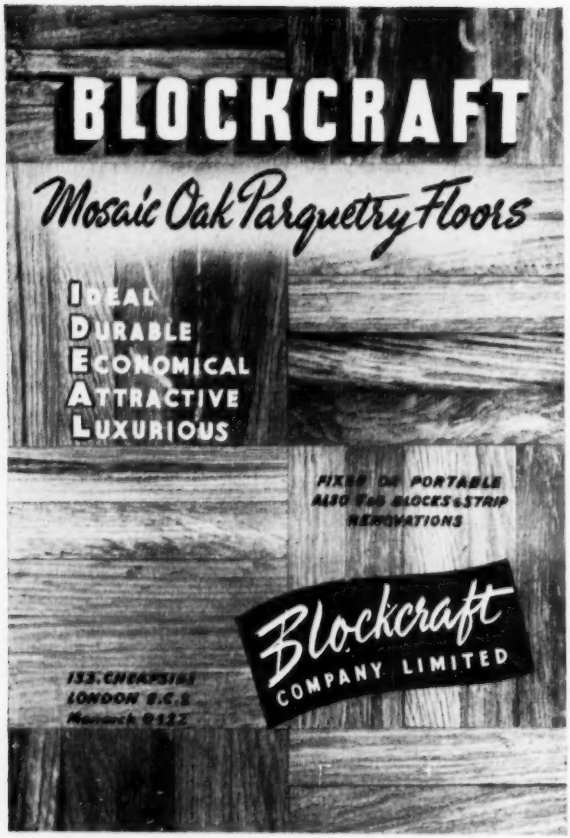

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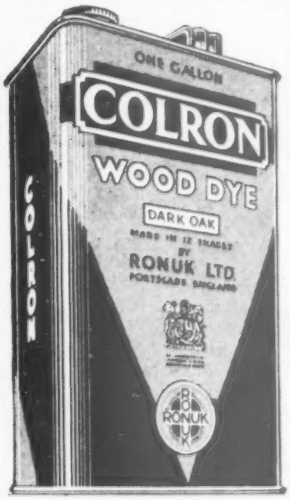

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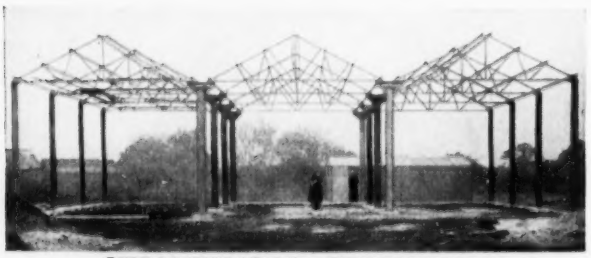

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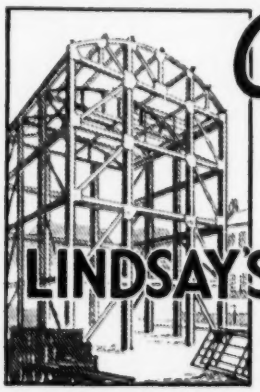

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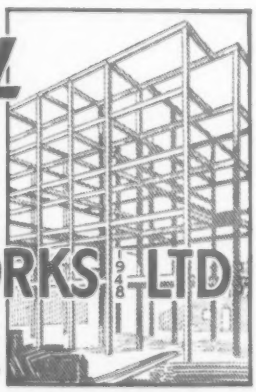

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COUNTY BOROUGH OF ROTHERHAM.

APPOINTMENT OF CHIEF ASSISTANT ARCHITECT GRADE VIII.

APPLICATIONS are invited for the above appointment in the Architect's Department in the office of E. J. Manson, B.Eng., A.M.I.C.E., Borough Engineer, at a salary in accordance with Grade VIII of the A.P.T. Division of Scales £760-£835.

Applicants must be Registered Architects and Associate Members of the Royal Institute of British Architects and have had considerable experience in design, construction and contract administration preferably with a local authority particularly in connection with housing schemes.

Applications, to be endorsed Chief Assistant Architect, stating age, qualifications, architectural training and details of experience together with copies of three recent testimonials, should be received by me not later than 5th May, 1953.

Canvassing will disqualify.

JOHN S. WALL,
Town Clerk.

Municipal Offices,
Rotherham.
10th April, 1953. [7030

KENT COUNTY COUNCIL.

APPLICATIONS are invited for appointment in the Buildings Department of a BUILDING SURVEYOR at a salary according to qualifications and experience in A.P.T. Grades IV-V(a) (£555-£685).

Applicants should have had practical experience in the building trade and be thoroughly competent to supervise work and prepare specifications and detailed estimates in connection with the maintenance of buildings, and to prepare drawings for new projects of a minor nature. They should preferably be Licentiates of the Institute of Builders by examination or have passed the examination for Building Surveyors of the Royal Institute of British Architects or hold an equivalent qualification.

Applications, on forms obtainable from the County Architect, Springfield, Maidstone, should be submitted to him within fourteen days of the appearance of this advertisement.

W. L. PLATTS,
Clerk of the County Council.

County Hall, Maidstone.
15th April, 1953. [7036

CITY AND COUNTY OF NEWCASTLE-UPON-TYNE.

APPLICATIONS are invited for the following appointments in the normal Housing and Flats Sub-sections of the City Architect's Department:—

(a) SENIOR ASSISTANT ARCHITECT, A.P.T. Division, Grade VII, £710-£785.
(b) SENIOR ASSISTANT ARCHITECT, A.P.T. Division, Grade VI, £670-£735.
(c) ASSISTANT ARCHITECT, A.P.T. Division, Grade IV, £555-£600.

Candidates for appointments (a) and (b) should be Associates, R.I.B.A., having considerable experience, and all applicants should possess marked ability in the design and construction of contemporary buildings.

The present work of the Sections includes the development of large housing neighbourhoods, with the probability that the intensive redevelopment of sites in central areas will become increasingly important.

The appointments will be subject to the National Conditions of Service as adopted by the City Council, to the provisions of the Local Government Superannuation Act, 1937, and to one month's notice on either side. Successful candidates will be required to pass a medical examination.

Applications stating position applied for, age, particulars of training, qualifications, experience, present and past appointments, togther with copies of two recent testimonials or the names and addresses of two persons to whom reference may be made, should be addressed to George Kenyon, A.R.I.B.A., A.M.T.P.I., City Architect, 18, Cloth Market, Newcastle-upon-Tyne, 1, not later than Saturday the 9th May, 1953.

JOHN ATKINSON,
Town Clerk.

Town Hall,
Newcastle-upon-Tyne, 1.
17th April, 1953. [7039

APPOINTMENTS—contd.

COUNTY LONDONDERRY EDUCATION COMMITTEE.

VACANCY FOR SENIOR ASSISTANT ARCHITECT.

APPLICATIONS are invited for the above position in the Committee's Office in Coleraine. Applicants must be Associate of the R.I.B.A. or have equivalent qualifications. Salary scale £655 × £25—£955 × £15—£970, point of entry according to experience and qualifications (scale at present under review). Travelling expenses at County Council Rates.

Application forms and conditions of appointment may be obtained from the undersigned and completed forms should be returned to County Education Offices, New Row, Coleraine, not later than Tuesday, 12th May, 1953.

R. B. HUNTER.
Director of Education.
[7040

TENDERS

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Firms desiring the opportunity of tendering, should forward particulars of materials they are able to supply for entry in the Council's Register.

The Register will be used for future invitations to tender for the supply of materials for this work.

T. W. BELL,
Clerk of the Council.

Council Offices,
Medomsley Road,
Consett,
Co. Durham.
13th April, 1953. [7032

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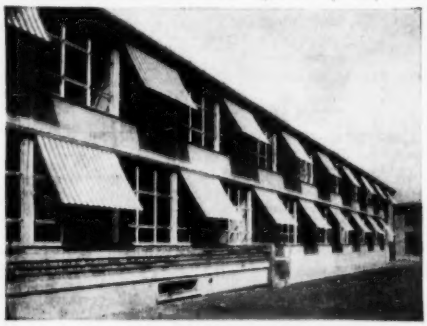

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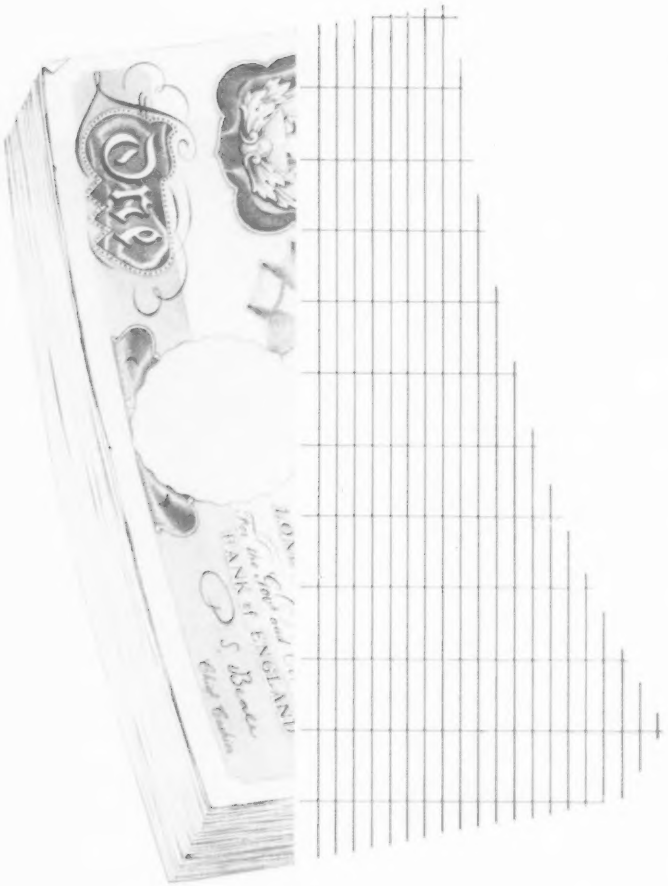

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